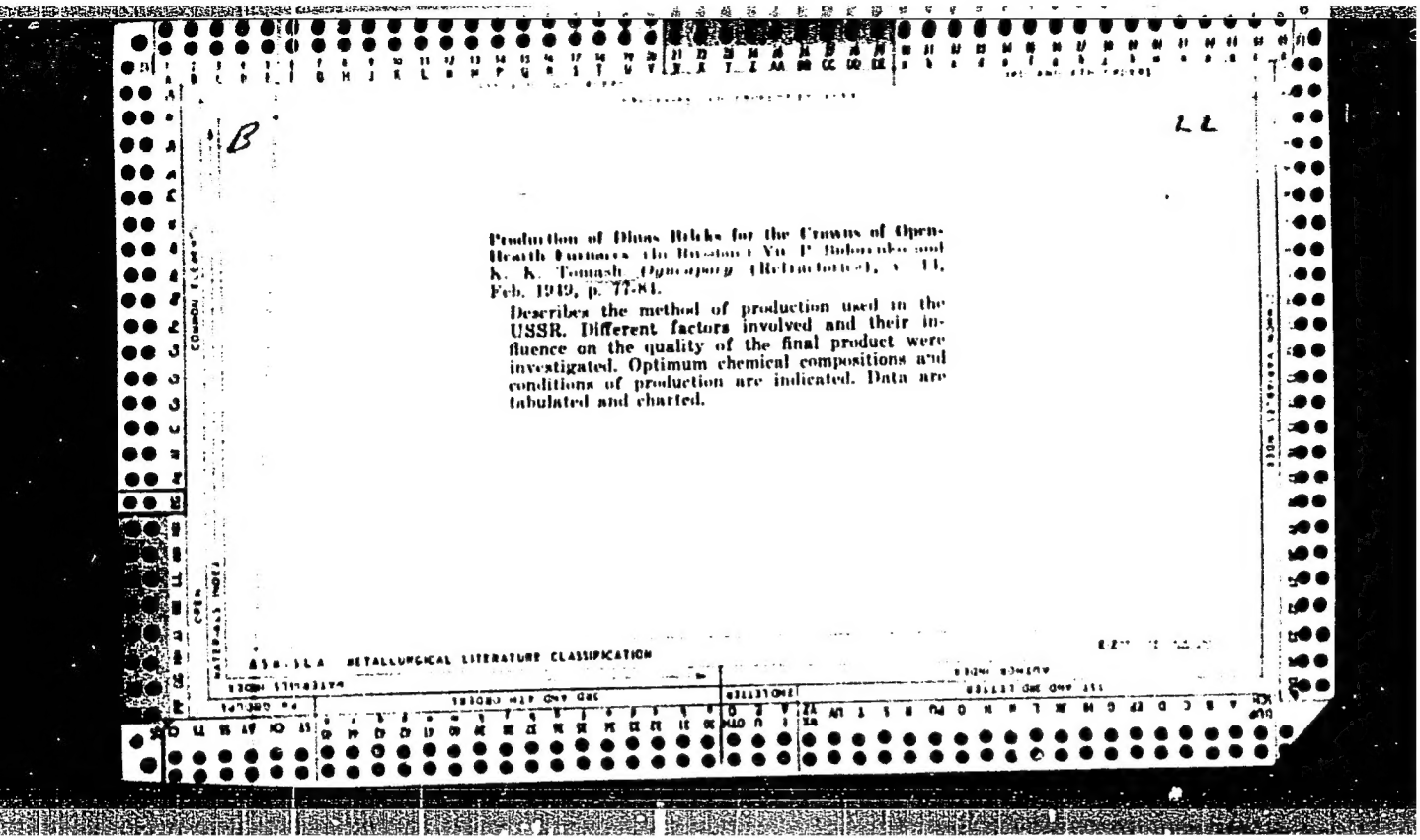


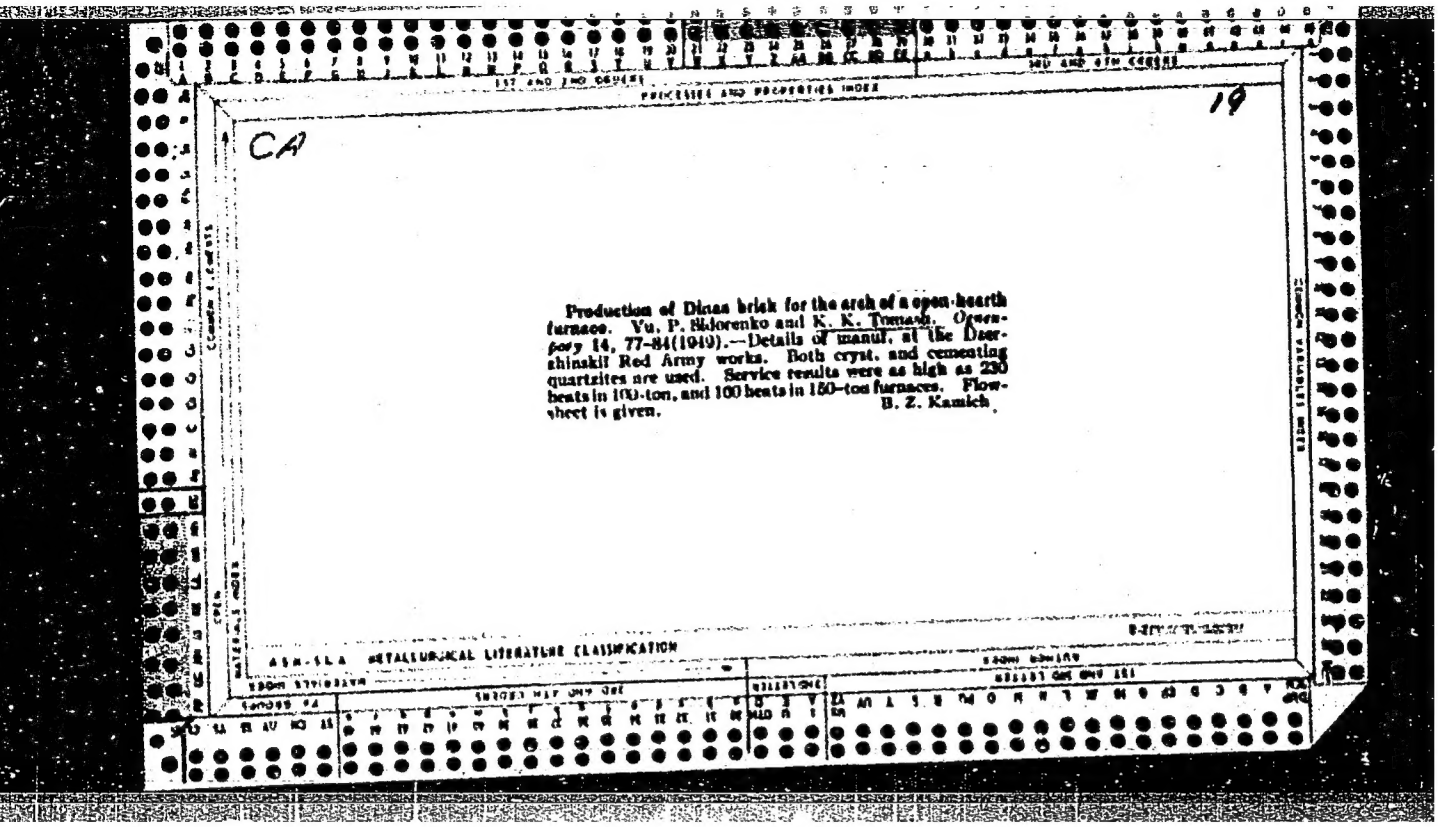
B

LL

Production of Glass Bricks for the Crowns of Open-Hearth Furnaces (by Russian) Yu. P. Roborenko and K. K. Tomash, *Ogneupory* (Refractories), v. 14, Feb. 1949, p. 77-81.

Describes the method of production used in the USSR. Different factors involved and their influence on the quality of the final product were investigated. Optimum chemical compositions and conditions of production are indicated. Data are tabulated and charted.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

19

Production of Dinas brick for the arch of a open-hearth furnace. Yu. P. Bidorenko and K. K. Tremash. *Ogneupory* 14, 77–84(1949).—Details of manuf. at the Dzerzhinskii Red Army works. Both cryst. and cementing quartzites are used. Service results were as high as 230 heats in 100-ton, and 100 heats in 150-ton furnaces. Flow-sheet is given.
B. Z. Kamich

TOMASH, L. K.

"Dinas production for the crowns of Martin furnaces"

Ogneupory, No. 2, 1949

[redacted], Yu. . ., Engr.; [redacted]

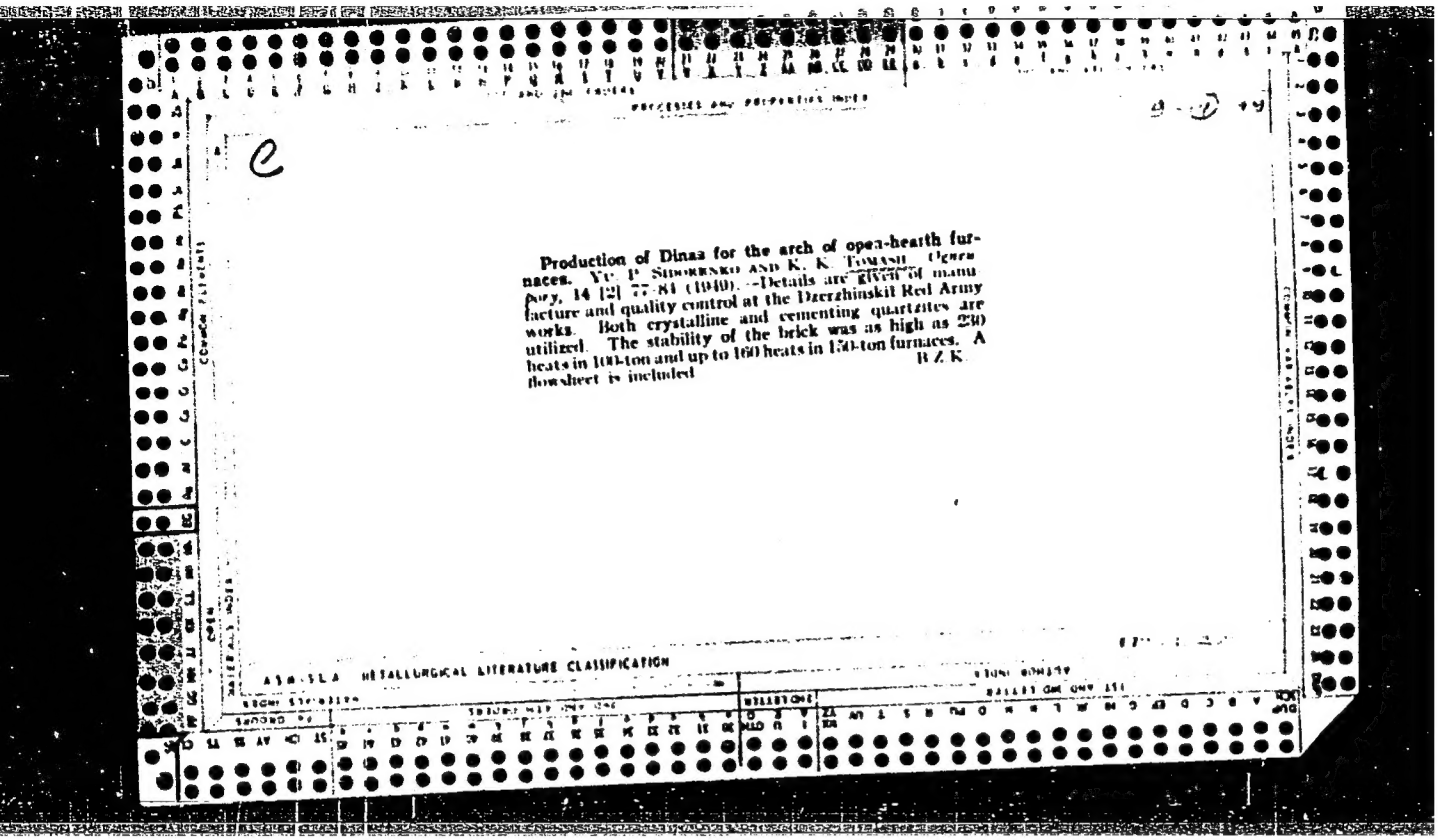
"Dinas production for the crowns of Martin furnaces"

Ogneupory, No. 2, 1949

TOMASH, K.K.

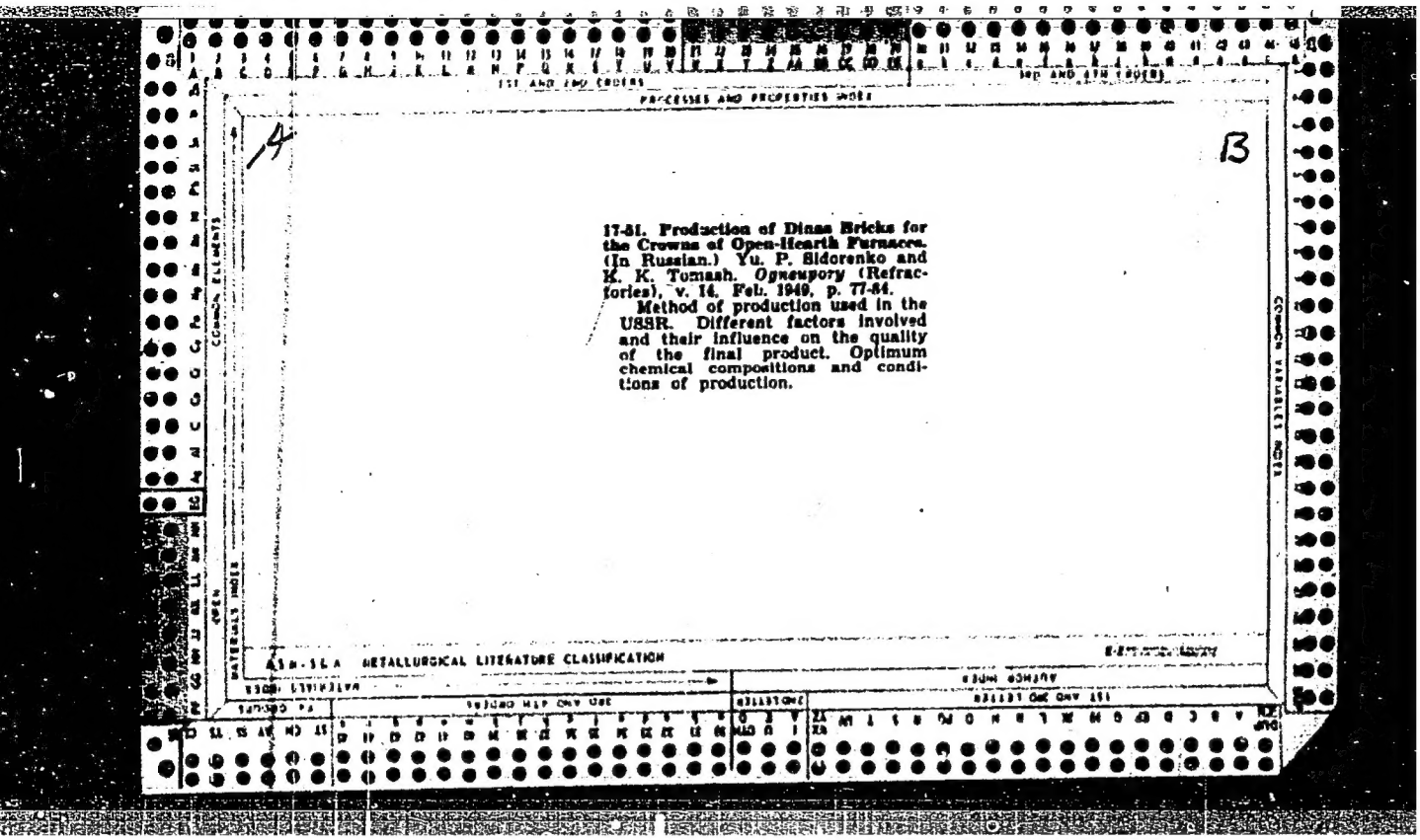
Reorganization of the Zaporozh'ye refractories plant. Ogneupory 28 no.1:9-12 '63. (MIRA 16:1)

1. Zaporozhskiy ogneupornyy zavod.
(Zaporozh'ye--Refractories industry)



Production of Dinas for the arch of open-hearth furnaces. Yu. P. Simonenko and K. K. Tomash. Ogneupory, 14 [2] 77-81 (1949).--Details are given of manufacture and quality control at the Dzerzhinskii Red Army works. Both crystalline and cementing quartzites are utilized. The stability of the brick was as high as 230 heats in 100-ton and up to 160 heats in 150-ton furnaces. A flowsheet is included

R Z K

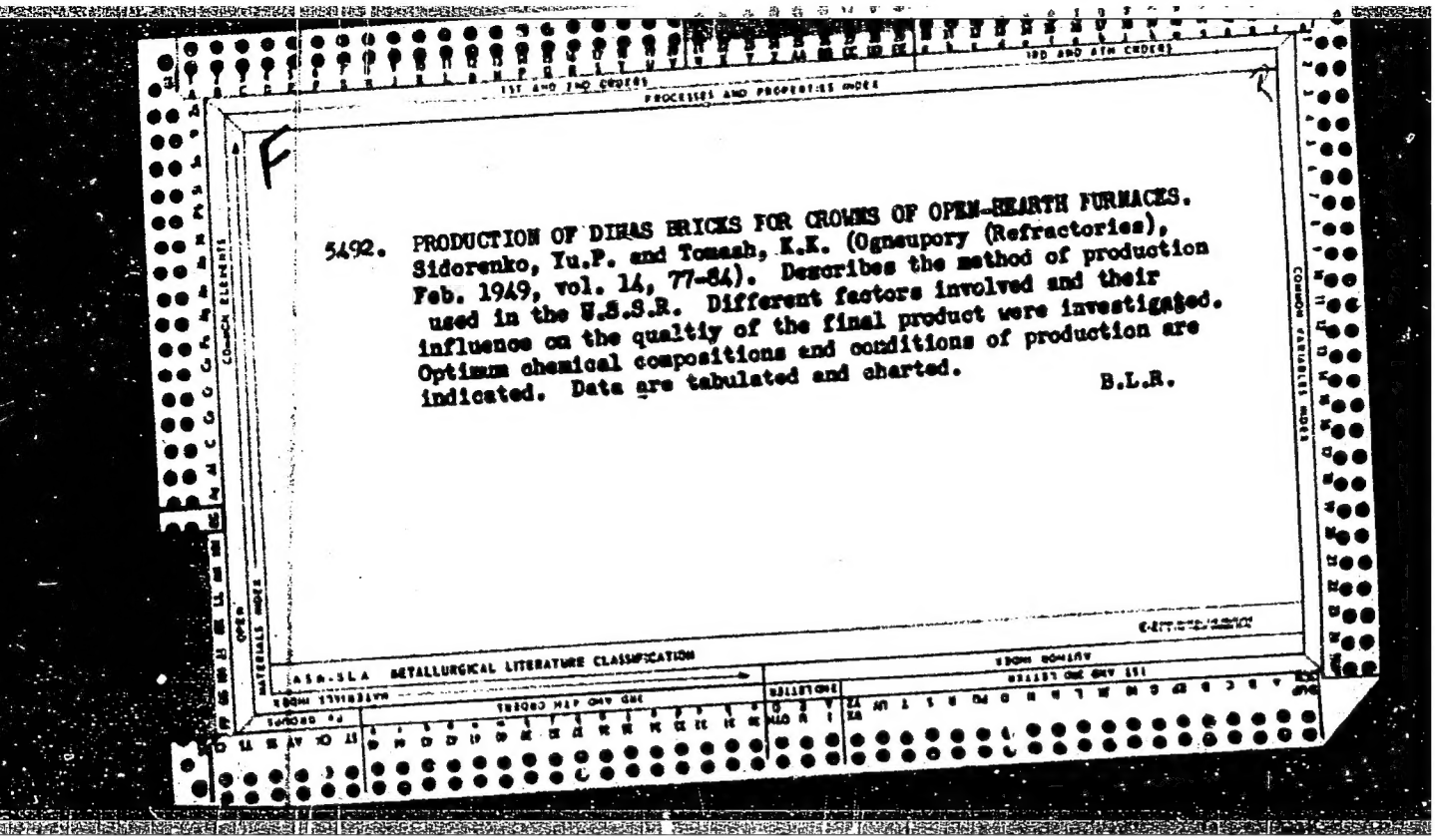


14

13

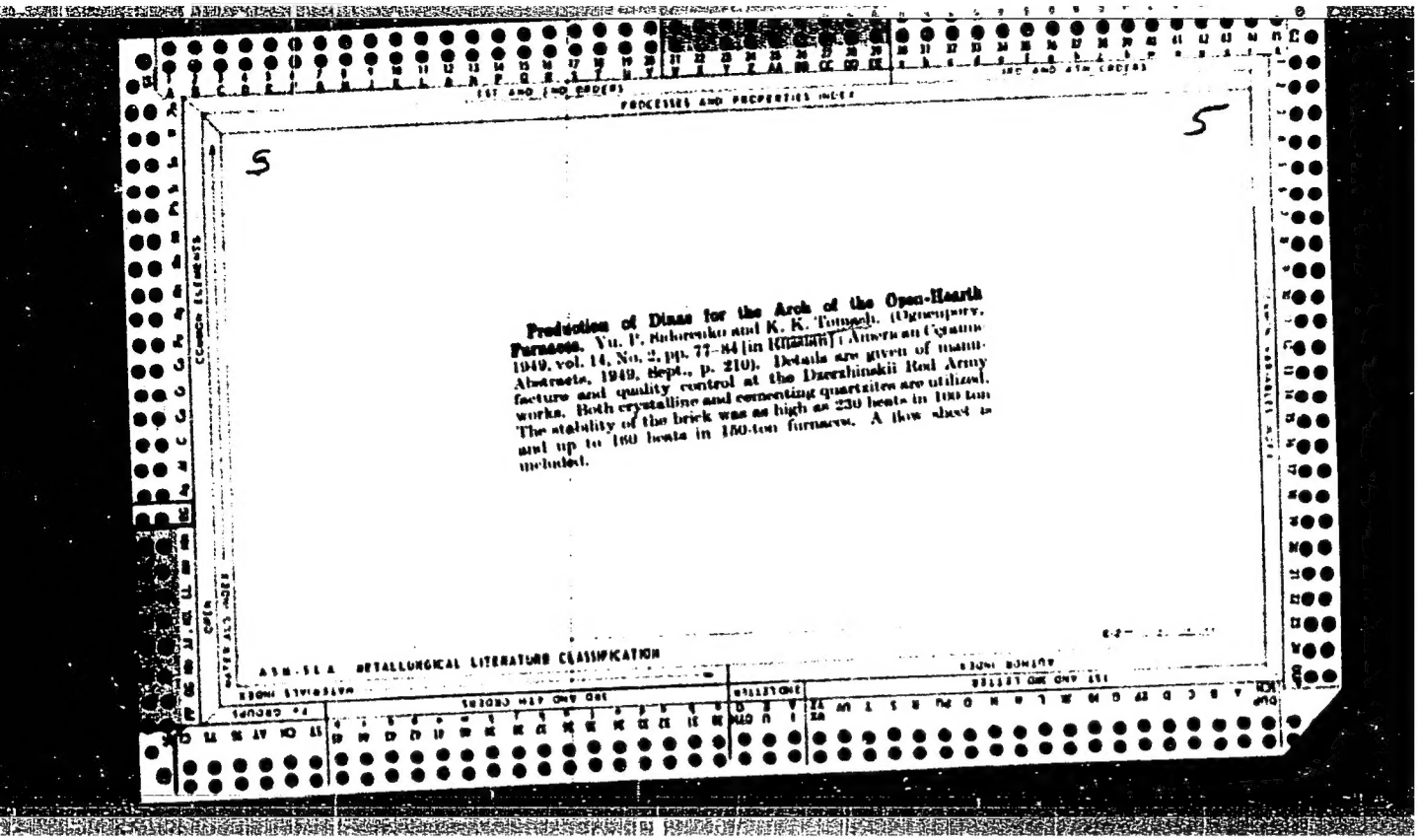
17-81. Production of Dinas Bricks for the Crowns of Open-Hearth Furnaces. (In Russian.) Yu. P. Sidorenko and K. K. Tomash. *Ogneupory* (Refractories), v. 14, Feb. 1949, p. 77-84.

Method of production used in the USSR. Different factors involved and their influence on the quality of the final product. Optimum chemical compositions and conditions of production.



5492. PRODUCTION OF DINAS BRICKS FOR CROWNS OF OPEN-HEARTH FURNACES. Sidorenko, Yu.P. and Tomash, K.K. (Ogneupory (Refractories), Feb. 1949, vol. 14, 77-84). Describes the method of production used in the U.S.S.R. Different factors involved and their influence on the qualtiy of the final product were investigated. Optimum chemical compositions and conditions of production are indicated. Data are tabulated and charted.

B.L.R.



5

5

Production of Dinas for the Arch of the Open-Hearth Furnaces. Yu. P. Sidorenko and K. K. Tomash. (Ogneupory, 1949, vol. 14, No. 2, pp. 77–84 [in Russian]) American Ceramic Abstracts, 1949, Sept., p. 210). Details are given of manufacture and quality control at the Dzerzhinskii Red Army works. Both crystalline and cementing quartzites are utilized. The stability of the brick was as high as 230 heats in 100-ton and up to 180 heats in 180-ton furnaces. A flow sheet is included.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

L 20797-66 EWP(j)/EWT(m)/T IJP(c) RM

ACC NR: AP6005955 (A) SOURCE CODE: UR/0191/66/000/002/0067/0068

AUTHORS: Tomash, N. V.; Dremin, V. D.; Filimonenko, L. T.

ORG: none

TITLE: The composition of the polymer part of the preliminary polymer obtained in the first stage of polymerization in the synthesis of impact-resistant polystyrene

SOURCE: Plasticheskiye massy, no. 2, 1966, 67-68

TOPIC TAGS: polystyrene, polymer, polymerization, graft copolymer, copolymerization, IR spectrum, IR absorption, turbidimeter, impact strength

ABSTRACT: The composition of the polymeric part of the preliminary polymer obtained by two-stage graft copolymerization of styrene and butadiene-styrene rubber is studied. At the end of the stage of preliminary polymerization, the reacting mass contains 25—30% of polymer, excluding the starting rubber (7—10%). The composition of the prepolymer was determined by selective precipitation. An FEK-M photocolorimeter was used for turbidimetric titration. The polymer part was precipitated from a benzene solution with methanol. The

Card 1/3

UDC: 678.746.22—136.22—134.622

L 20797-66

ACC NR: AP6005955

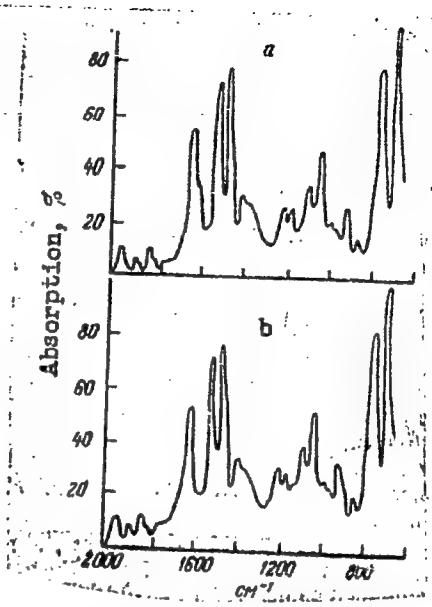
infrared spectra of the products from the solution of the polymer part agree with the spectra of butadiene-styrene rubber, the impact-resistant block polystyrene, and the free polystyrene (see Fig. 1).

Card 2/3

L 20797-66

ACC NR: AP6005955

Fig. 1. Infrared spectra: a - pure polystyrene; b - product of polymer part from a benzene solution of it with an acetone-methanol mixture in 1:5.



Orig. art. has: 4 graphs.
SUB CODE:11,07/ SUBM DATE: none/ ORIG REF: 001/ OTH REF: 001

Card 3/3

TOMASH, N. V.

TOMASH, N. V. "Investigation of the Molecular Polymorphism of Orthomethoxy Benzaldehyde." Min Higher Education Ukrainian SSR. Khar'kov Polytechnic Inst. imeni V. I. Lenin. Khar'kov, 1956. (Dissertation for the Degree of Candidate in Chemical Science)

So: Knizhnaya Letopis', No. 19, 1956.

TOMASH, N.V.; DREMIN, V.D.; FILIMONENKO, L.T.

Composition of the polymeric part of the forepolymer obtained during the first stage of polymerization in the synthesis of shockproof polystyrene. Plast. massy no.2:67-68 '66.
(MIRA 19:2)

L 11597-66 EWT(m)/EWP(j) RM

ACC NR: AP6000350 SOURCE CODE: UR/0286/65/000/021/0047/0047

44,55 44,55 44,55 44,55

AUTHORS: Shamrayev, G. M.; Priz, M. N.; Tomash, N. V.; Dremin, V. D.

4/6 B

ORG: none

TITLE: Method for obtaining unsaturated polyesters. Class 39, No. 176063 [announced by Ukrainian Scientific Research Institute for Plastics (Ukrainskiy nauchno-issledovatel'skiy institut plasticheskikh mass)] 44,55

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 47

TOPIC TAGS: polymer, polymerization, polyester

ABSTRACT: This Author Certificate presents a method for obtaining unsaturated polyesters on the basis of diethylene glycol or ethylene glycol and maleic anhydride. To render the polyesters insensitive to the inhibiting effect of the air during the hardening process and to increase the variety of polyesters, endomethylene tetrahydrophthalic anhydride and cyclopentadiene are added to the reaction mixture.

SUB CODE: 11/ SUBM DATE: 17Sep64

HW

Card 1/1 UDC: 678.674'4'0

S/076/61/035/009/010/015
B106/B110

AUTHORS: Vintaykin, Ye. Z., and Tomash, Ya.

TITLE: Vapor pressure of pure cobalt

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 9, 1961, 2121 - 2122

TEXT: The authors studied the saturation vapor pressure of pure cobalt, since publication data on this subject differ considerably. In Ref. 3 (An. N. Nesmeyanov i De Dyk Man, Dokl. AN SSSR, 123, 1064, 1959; De Dyk Man, Avtoreferat dissertatsii (Author's abstract of a dissertation)) an important dependence of vapor pressure in a Knudsen vessel on the surface of the effusion opening was found, thus causing in the known formula $p = p_o \alpha Q/\alpha + S$ (1) (where p_o is the saturation vapor pressure; p the actual vapor pressure in the Knudsen vessel; S the surface of the effusion opening; Q the surface of the specimen; α the evaporation coefficient) a great deviation of the coefficient α from 1. For determining the vapor pressure the authors used Knudsen's method with radiometric determination of the metal weight on the condensation disks (Ref. 4: Ye. Z. Vintaykin, Dokl. AN SSSR, 117, 632, 1957; De Dyk Man, Avtoreferat dissertatsii

Card 1/4

S/076/61/035/009/010/015
B106/B110

Vapor pressure of pure cobalt

(Author's abstract of a dissertation)). Electrolytic cobalt was investigated, into which Co^{60} was introduced by metallurgical means. The metal in the form of fine filings was entered for measuring into a Knudsen vessel made of tantalum. The radiochemical analysis of the condensation disks was conducted on the basis of β-radiation of Co^{60}. In view of the data in Ref. 3, effusion openings with the surface $0.825 \cdot 10^{-2}$ and $2.25 \cdot 10^{-2}$ cm^2 were used to permit a determination of the equilibrium vapor pressure and the evaporation coefficient. The cross section of the Knudsen vessel (0.5 cm^2) was assumed as surface of the specimen. The vapor pressure measurements were conducted in the temperature range of 1100 - 1250°C. The results obtained are shown in the figure. Each experimental point of the figure represents the mean value of 4 - 10 measurements; the circumference of each point corresponds to the root mean square error of the mean value. As may be seen from the figure, the results for different effusion openings practically coincide. A value between 1 and 0.2 was found for α, which does not agree with the data in Ref. 3 ($\alpha = 3 \cdot 10^{-4}$). This fact, however, is of no great importance, as the evaporation coefficient is no fundamental

Card 2/4

Vapor pressure of pure cobalt

characteristic of metals but is determined by the accommodation coefficient and the purity of the metal surface. The very low value of the evaporation coefficient of Ref. 3 is obviously due to a considerable degree of oxidation of the sample surface. The authors determined the following equation for the saturation vapor pressure of cobalt: $\log p_{at} = -(21900/T) + 7.130$.

This result deviates from publication data. The figure also shows results of vapor pressure measurements of cobalt over an iron-cobalt alloy with 10.5 atom% cobalt. On the basis of the results obtained, the thermodynamic activity coefficient has approximately the value 1, which agrees with results of thermodynamic investigations (Ref. 5: T. Satow, S. Kachi, K. Jwase, Sci. Rep. Res. Inst. Tohokou Univ., 8, 502, 1956). This agreement speaks for the correctness of values obtained for the cobalt vapor pressure. There are 1 figure and 5 references: 3 Soviet and 2 non-Soviet. The reference to the English-language publication reads as follows: Edwards, Johnston a. Ditmors, J. Amer. Chem. Soc., 73, 4729, 1951.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy)

Card 3/4

VINTAYKIN, Ye.Z.; TOMASH, Ya.

Vapor pressure of pure cobalt. Zhur.fiz.khim. 35 no.9:2121-2122 '61. (MIRA 14:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii.

(Cobalt) (Vapor pressure)

TOMASHAYEV, K.

Lithology of the Upper Jurassic carbonate sediments in the Kugitangtau and Ketmen'-Chapty (Turkmen S.S.R.). Lit. i pol. iskop. no.6:54-66 N-D '65. (MIRA 18:12)

1. Institut geologii Ministerstva geologii SSSR, Ashkhabad. Submitted July 3, 1964.

TOMASHAYEV, K.

Boundary layers of the carbonate and salt-gypsum series of the upper Jurassic of Kugitang. Izv.AN Turk.SSR.Ser.fiz.-tekh., khim.i geol.nauk no.1:80-83 '62. (MIRA 16:12)

1. Institut geologii AN Turkmenskoy SSR.

20717

5.1600 1043, 1273, 1142

S/120/61/000/001/060/062
E032/E114

AUTHOR: Tomashchik, A.K.

TITLE: A High-Pressure Bomb for Optical Studies at Low Temperatures

PERIODICAL: Pribory i tekhnika eksperimenta, 1961,No.1,pp.193-194

TEXT: A description is given of a high-pressure chamber for studying the optical and photoelectric properties of crystals at low temperatures. The pressure is produced by freezing water in a constant volume bomb. The bomb is shown schematically in Fig.1. The main body 1 is made of beryllium bronze and the windows 2 from methyl methacrylate. The windows are 8 mm in diameter. The specimen is attached to the end of the piston 4 which contains a cylindrical channel through which the water is introduced. The pressure at 20 °K reaches 1750 atm (V.G.Lazarev, Ref.1). The bomb has been used to investigate the absorption spectra of CdS single crystals at 20 °K. It was found that the absorption edge at 2057.1 cm^{-1} shifts towards shorter wavelengths by 170 cm^{-1}. This is in agreement with the data reported by I. Höhler (Ref.4).

Card 1/3

S/120/61/000/001/069/062
E032/E114

A High-Pressure Bomb for Optical Studies at Low Temperatures

Acknowledgements are expressed to A.F. Prikhot'ko and V.L. Broude for interested advice.
There are 2 figures and 5 references: 3 Soviet and 2 non-Soviet.

ASSOCIATION: Institut fiziki AN USSR
(Physics Institute, AS Ukr.SSR)

SUBMITTED: January 8, 1960

Card 2/3

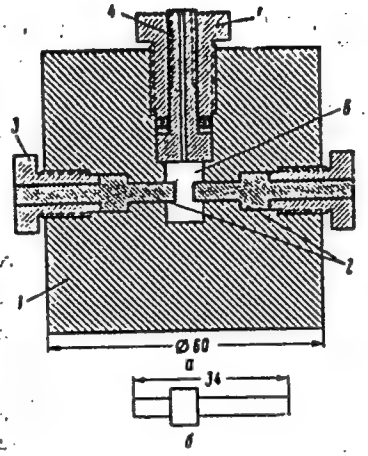
20717

S/120/61/000/001/060/062
E032/E114

A High Pressure Bomb for Optical ..

Fig. 1

Legend:
1 - body
2 - window
3 - obturator
4 - piston
5 - piston screw
6- working volume
7 - methyl methacrylate windows



Card 3/3

TOMASHCHIK, A.K. [Tomashchyk, O.K.]

Determining the position of absorption bands in deformed CdS crystals. Ukr.fiz.zhur. 6 no.6:820-822 N-D '61. (MIRA 16:5)

1. Institut fiziki AN UkrSSR, Kiyev.
(Cadmium sulfide crystals—Spectra)

BROUDE, V.L.; TOMASHCHIK, A.K. [Tomashchyk, O.K.]

Spectral study of thermally stressed crystalline films. Ukr. fiz. zhur. 9 no.1:38-45 Ja '64. (MIRA 17:3)

1. Institut fiziki AN UkrSSR, Kiyev.

TOMASHCHIK, A.K.

High-pressure bomb for optical investigations at low temperatures.
Prib. i tekh. eksp. 6 no.1:193-194 Ja-F '61. (MIRA 14:9)

1. Institut fiziki AN USSR.
(Low temperature research--Equipment and supplies)

PRIKHOT'KO, A.F.; SOSKIN, M.S.; TOMASHCHIK, A.K.

Measurement of the absorption spectra slender deformed naphthalene crystals. Opt. i spektr. 16 no. 4:615-618 Ap '64. (MIRA 17:5)

SOV/120-58-2-35/37

AUTHORS: Brandt, N. B. and Tomashchik, A. K.

TITLE: The Use of Alcohol-Water Solutions to Obtain Pressures at Low Temperatures (Ispol'zovaniye rastvorov spirt - voda dlya polucheniya davleniy pri nizkikh temperaturakh)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 2, pp 113-114 (USSR)

ABSTRACT: It is possible to increase considerably the uniformity of the pressure within a "bomb" and to obtain any required pressure (not exceeding 2000 atm) by the use of water solutions of ethyl alcohol instead of water. Fig.1a shows the dependence of the relative increase of the volume of such solutions on freezing on the concentration of alcohol. Curve 1 shows the resulting change in the volume relative to the initial volume of the solution at a temperature of 20°C. Curve 2 shows the change in the volume relative to the volume of the solution at the temperature of freezing. The freezing temperature of alcohol-water solutions is shown in Fig.1b. Fig.2 shows the dependence of the pressure on concentration

Card 1/3

The Use of Alcohol-Water Solutions to Obtain Pressures at Low Temperatures.

of alcohol at helium temperatures when the bomb is filled with solutions at 20°C. The pressure was measured by the shift in the critical temperature of tin (Ref.1). Results were obtained for a bomb made from unrefined beryllium bronze and having the following dimensions:- 12 x 6 mm, length of inner cavity 50 mm. Experiments on the solid phase of the alcohol-water solutions have shown that the coefficient of internal friction rapidly decreases as the concentration of alcohol increases. Thus, for example, the coefficient of internal friction at a temperature of -35°C decreases by a factor of several tens when the concentration of alcohol is increased from 5 to 10%. The use of water solutions of alcohol reduces the nonuniformity of pressure which occurs when specimens are compressed and gives very reproducible results. There are 2 figures, no tables and 5 Soviet references.

ASSOCIATION: Fizicheskiy fakul'tet MGU
(Department of Physics of the Moscow State University)

SOV/120-58-2-35/37

The Use of Alcohol-Water Solutions to Obtain Pressures at Low Temperatures.

SUBMITTED: July 19, 1957.

1. Pressure--Temperature factors 2. Ethanol solutions--Applications

Card 3/3

ACC NR: AP6017656 (N) SOURCE CODE: UR/0136/66/000/001/0075/0078

AUTHOR: Raytbarg, L. Kh; Vul'fovich, L. B.; Tomashchik, Ye. G.

ORG: none

TITLE: Deformation resistance of aluminum alloys under cold pressing conditions

SOURCE: Tsvetnyye metally, no. 1, 1966, 75-78

TOPIC TAGS: cold working, metal pressing, metal deformation, deformation rate, aluminum alloy / AD1 aluminum alloy, D1 aluminum alloy

ABSTRACT: The true yield strength S_y, which is affected by changes in temperature, degree of deformation (ϵ), and deformation rate (w), was studied in two typical aluminum alloys, AD1 (soft) and D1 (hard) under cold pressing conditions. In the AD1 alloy, the most pronounced increase in S_y is observed at w = 0.5-3.0 sec^{-1} (see Fig. 1). In the D1 alloy, the effect of a tenfold increase in deformation rate (from 0.5 to 5 sec^{-1}) is even greater than in AD1 (see Fig. 2). This is due to a greater evolution of heat during deformation, and to the resultant heating up of the specimen, which causes a more marked decrease of S_y. This phenomenon is more pronounced the higher the deformation rate. It is concluded that under cold pressing conditions, the deformation rate substantially affects the strength characteristics of aluminum alloys. Orig. art. has: 3 figures.

Card 1/2 UDC: 669.71:620.17

L 59990-65

ACC NR: AP6017656

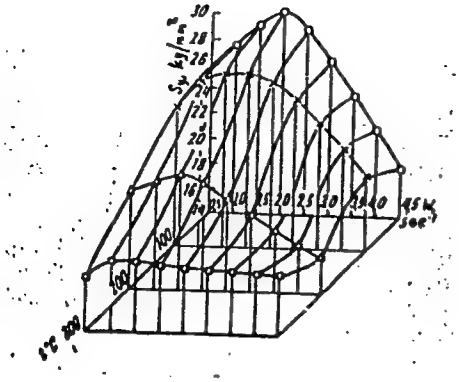


Fig. 1. S_y vs. rate w and temperature t, °C for AD1 alloys

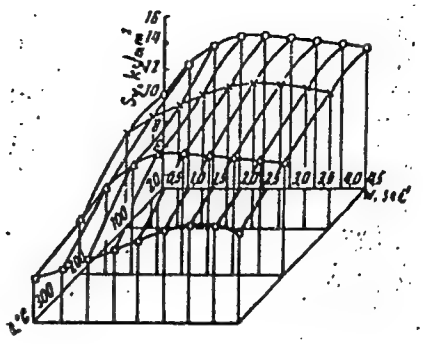


Fig. 2. S_y vs. rate w and temperature t, °C for D1 alloys

SUB CODE: 11,13/ SUBM DATE: none/ ORIG REF: 005

Card 2/2 11b

KHOMIK, Tanya, yunnat; KRIKUN, yunnat; TOMASHCHUK, Kolya, yunnat

How we propagate currants. IUn. nat. no.7:32-33 Jl '61.
(MIRA 14:7)

(Currants)

TOMASHCHUK, V.D.

PHASE I BOOK EXPLOITATION SOV/4870

Arnol'dov, Ye. M., T.T. Honta, V.V. Kalechyts', O.I. Mikhnenko, Ya. M. Maytis, O.M. Marzin, D.M. Savych, V.D. Tomashchuk, A.M. Shvans'kyy

Khimichna promyslovist' Ukrayiny (Chemical Industry of the Ukraine) [Kyyiv, Derzh. vyd-vo tekhn. lit-ry URSR] 1960. 128 p. 2,000 copies printed. (Series: Do dekady ukrayins'koyi literatury ta mystetstva v Moskvi)

Ed.: A.I. Dukovyaknykov; Ed. (Inside Book): L. Raytburd; Tech. Ed.: L. Horkavenko.

PURPOSE: This book is intended for the general reader interested in the development of the chemical industry of the Ukraine.

COVERAGE: The authors discuss the recent development of several important branches of the Ukrainian chemical industry. The text is illustrated with many photographs of equipment and installations. No personalities are mentioned. There are no references.

Card 1/3

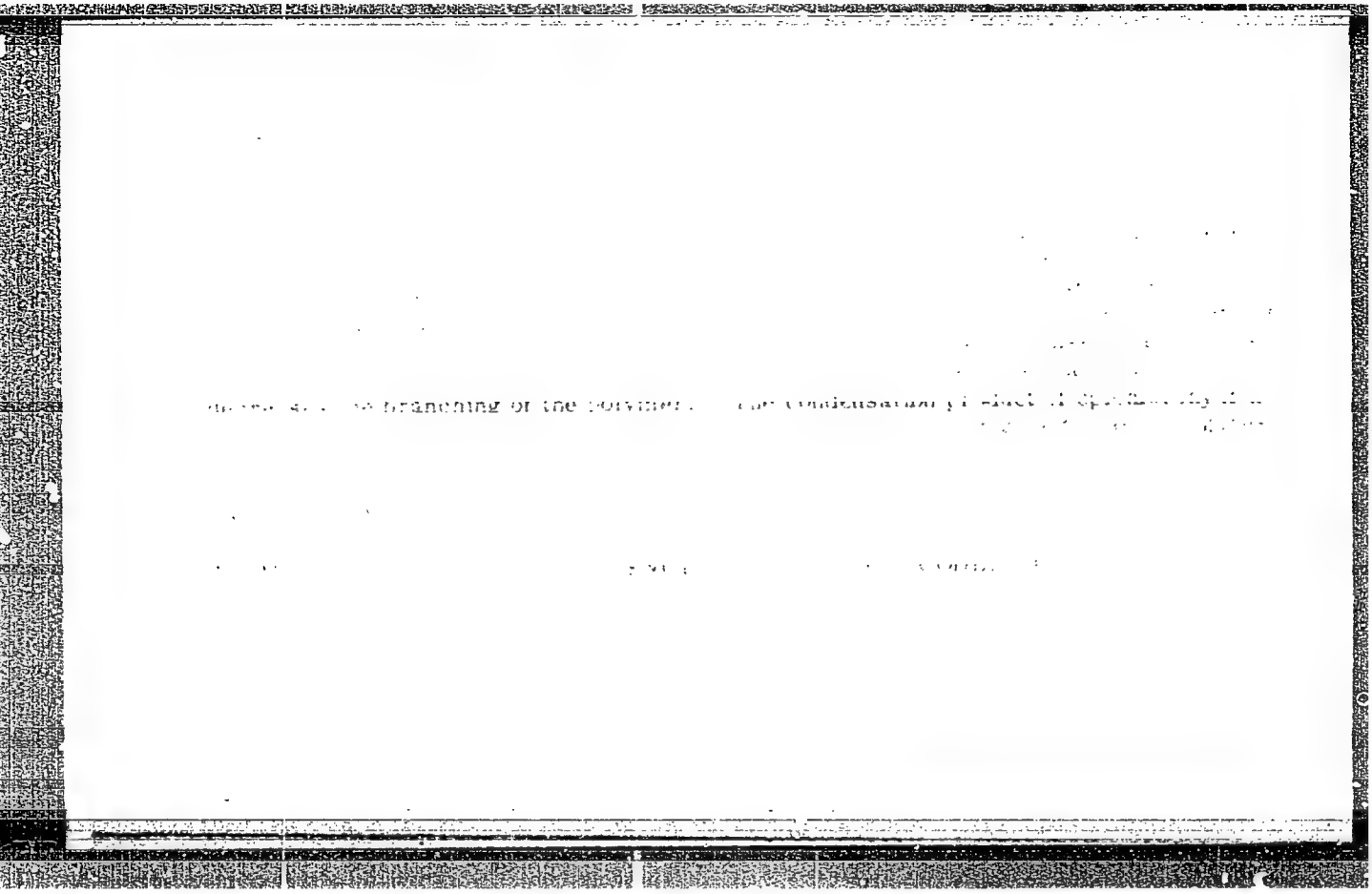
ARNOL'DOV, IE.M.; GONTA, T.T. [Honta, T.T.]; KALECHITS', V.V.; MIKHIENKO, O.I.; MEYTIN, Ya.M.; MURZIN, O.M.; SAVICH, D.M.; TOMASHCHUK, V.D.; SHVANSKIY, A.M. [Shvans'kyi, A.M.]; RUKAVISHNIKOVA, A.I., red.; RAYTBURD, L., red.; GORKAVENKO, L. [Horkavenko, L.], tekhn.red.

[Chemical industry of the Ukraine] Khimichna promyslovist' Ukrainy. Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1960. 128 p. (MIRA 13:11)

(Ukraine--Chemical industries)

TITLE: Bulk polymerization of vinyl chloride in the presence of hydrogen chloride acceptors

TOPIC TAGS: hydrogen



L 00059-66 EWT(1)/EWA(h)

ACCESSION NR: AP5021343 UR/0120/65/000/004/0123/0126
539.1.073.2

AUTHOR: Tomashchuk, Yu. F.; Radevich, I. A.

TITLE: High voltage pulse generator with short signal delays for spark chamber actuation

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1965, 123-126

TOPIC TAGS: spark chamber, spark gap, pulse generator

ABSTRACT: The operation of small interelectrode gap (~1 cm) spark chambers depends in an essential way on the delay in arrival of the high voltage pulse following the instant of passage of the ionizing particle. This article presents and describes two such generators of high voltage pulses whose fronts at loads of 700 pF are not greater than 30 nsec. The maximum delay from the instant of the application of the triggering signal to the instant of generation of the high voltage pulse is not longer than 40 nsec. One of the devices utilizes the VIR-5 vacuum spark relay as a switch. Both use two highly sensitive blocking generators with 6V3S and 6V2P secondary emission tubes, respectively. The second alternative incorporates an anode-cathode feedback. Lifetime tests of three VIR-5 relays show that they can survive at least $5 \cdot 10^4$ cycles. "The

Card 1/2

L 00059-66
ACCESSION NR: AP5021343

authors thank S.T. Frankovskiy for help during the investigation." Orig. art. has:

ASSOCIATION: Institut eksperimental'noy i teoreticheskoy fiziki GKAE, Moscow (Institute of Experimental and Theoretical Physics, GKAE)

SUBMITTED: 13Mar64 ENCL: 00 SUB CODE: NP, EE

NO REF SOV: 004 OTHER: 002

mlb
Card 2/2

ACC NR: AP6021994 SOURCE CODE: UR/0120/66/000/003/0035/0040

AUTHOR: Radkevich, I. A.; Tomashchuk, Yu. F.; Smolyankina, T. G.; Sokolovskiy, V. V.

ORG: Institute of Theoretical and Experimental Physics, GKAE, Moscow (Institut teoreticheskoy i eksperimental'noy fiziki GKAE)

TITLE: Spark chambers for slow-particle recording

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1966, 35-40

TOPIC TAGS: spark chamber, nuclear particle, particle counting

ABSTRACT: Frame-type and "pen-box" type spark chambers with an interelectrode gap of 1 cm are described; each type may have thin and thick electrodes. A device for aluminum foil stretching is shown (a sketch), as well as a system for gas filling and gas purification. A 12-gap frame-type chamber had memory times of 300 and 550 nsec for clearing fields of -600 and -400 v, respectively; the efficiency corresponding to the minimum delay was 0.97. Plots of chamber efficiency vs. pulse delay for various clearing voltages are given. "In conclusion, the authors wish to thank A. I. Levkov and S. T. Frankovskiy for their help in measurements and also Yu. I. Oreshkin for his help in building the chambers." Orig. art. has: 8 figures. [03]

SUB CODE: 18 / SUBM DATE: 20May65 / ORIG REF: 006 / OTH REF: 004/ ATD PRESS: 5039

Card 1/1 UDC: 539.1.073

BREVNOV, N.N.; TOMASHCHUK, Yu.F.

Effect of local perturbations of a magnetic field on the confinement of particles in a magnetic adiabatic trap. Atom. energ. 13 no.5:421-428 N '62. (MIRA 15:11)
(Magnetic fields)
(Plasma (Ionized gases))

34438
S/185/61/006/006/018/030
D299/D304

9.4177 (1035,1051)

AUTHOR: Tomashchyk, O.K.

TITLE: Determining the position of absorption bands in deformed CdS crystals

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961, 820 - 821

TEXT: A method is proposed for determining the position of absorption bands as a function of the degree of CdS crystals. The method is based on the relation between the absorption bands and photocurrent variations, as the photocurrent maxima (and minima) can be clearly seen even in the case of deformed crystals, their position being independent of specimen thickness. In studies of CdS photoconductivity it was established (in the references), that the maxima of the absorption bands may coincide with the maxima or minima of the photocurrent. The proposed method does not require photometering. A high-pressure container was developed for study of absorption- and photoconductivity spectra at low temperatures. The

Card 1/2

pressure, of the order of 1700 atm, was produced through freezing of water. The experimental method was described by the author in an earlier work. The absorption- and photoconductivity spectra of undeformed- and deformed crystals are shown in two figures (at 77 and 20°K respectively). From the photoconductivity spectrum it is clearly evident that the absorption band, which corresponds to a minimum of the photoconductivity curve, is shifted towards the shortwave side by 30 Å approximately, (the curves corresponding to 77°K). Whereas the fine structure of the absorption band of the deformed crystal is not observable (even at 20°K) without photometering, the photoconductivity curves show that the absorption band which corresponds to a photoconductivity minimum, is shifted by approximately 36 Å towards short waves. The difference in the magnitude of the shift (at 77 and 20°K respectively) is due to the experimental conditions. There are 3 figures and 6 Soviet-bloc references.

ASSOCIATION: Instytut fizyky AS UkrRSR (Institute of Physics of the UkrSSR), Kyyiv

ACCESSION NR: AP4012030 S/0185/64/009/001/0038/0045

AUTHOR: Broude, V. L.; Tomashchy*k, O. K.

TITLE: Spectral study of thermally stressed crystalline films

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 1, 1964, 38-45

TOPIC TAGS: strain, thin films, absorption spectrum, naphthalene, naphthalene single crystal film, anthracene, phenanthrene, whisker crystal

ABSTRACT: The absorption spectra of thermally stressed naphthalene single crystal films adhering to a quartz support were studied at 20°K. A pronounced change in these spectra for thin films was correlated with a different mechanical behavior of these films. It was shown that naphthalene crystals with a thickness of 1.5 μ contracted by 4% along the b axis vs. their dimension at room temperature, those 0.5 μ thick by 0.5%, and those 0.2 μ thick to an infinitely small extent. A behavior similar to that of naphthalene crystals was established for anthracene and phenanthrene crystals. The phenomena observed are explained by an exceptional rigidity of very thin single-crystal films, which assume the properties of "whisker" crystals. Orig. art. has: 5 figures.

Card 1/2

ACCESSION NR: AP4012030

ASSOCIATION: Insty*tut Fizy*ki AN URSR, m. Ky*yiv (Institute of Physics, AN URSR)

SUBMITTED: 22Jun63 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: AP, PH NO REF SOV: 007 OTHER: 000

Card 2/2

L 32225-66 T IJP(c)

ACC NR: AP6020842 SOURCE CODE: YU/0006/65/000/10-/0259/0264

AUTHOR: Tomashegovich, Zdenko (Doctor; Zagreb)

54
B

ORG: none

TITLE: Reliability of photogrammetrically produced contour lines of wooded areas

SOURCE: Geodetski list, no. 10-12, 1965, 259-264

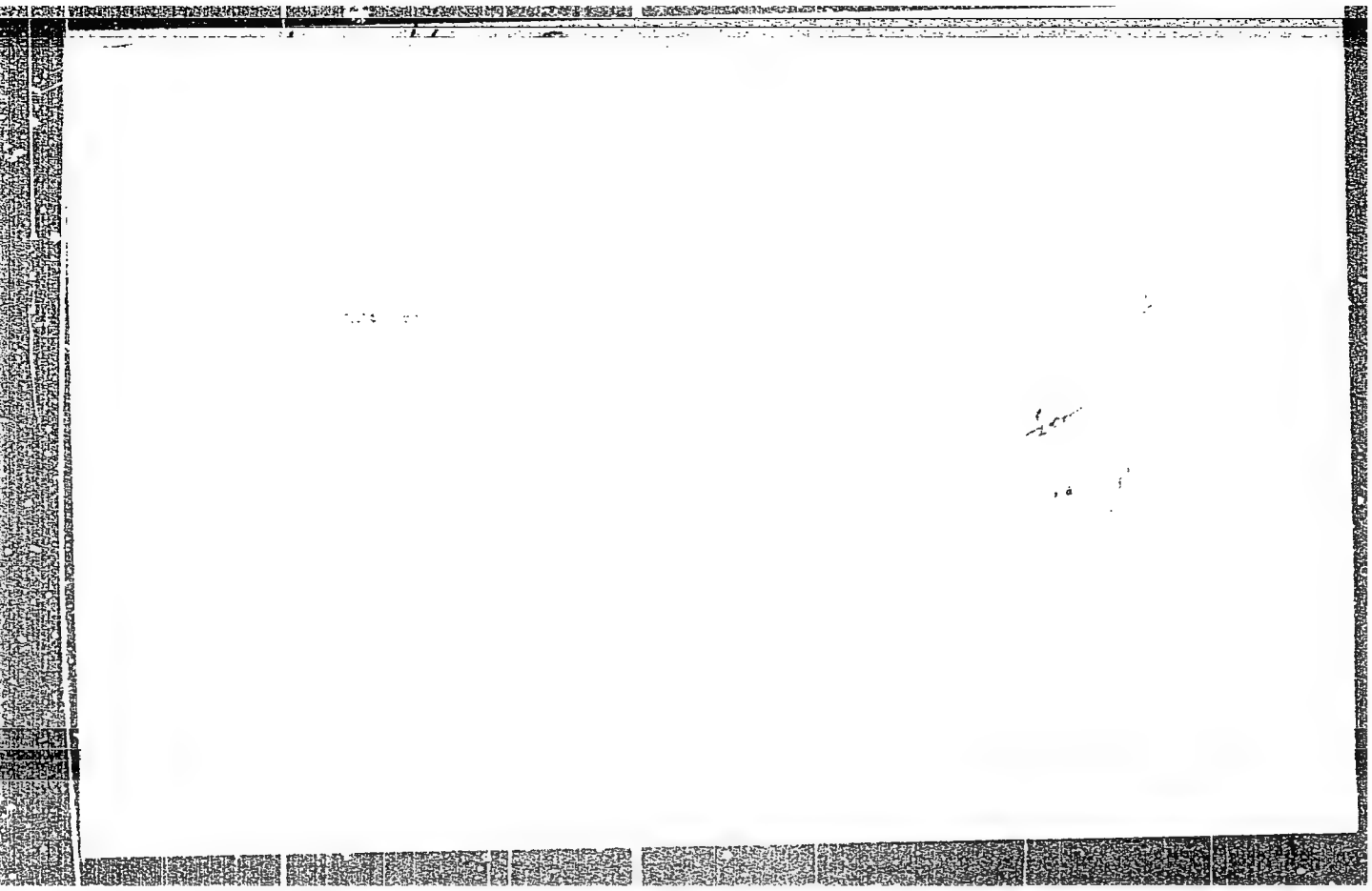
TOPIC TAGS: photogrammetry, error, aerial survey, topography, aerial photography

ABSTRACT: On the basis of results of Yugoslav and foreign researchers, the author 1) discusses the general reliability of photogrammetrically produced contour lines of wooded areas; 2) studies various causes and magnitudes of errors; and 3) recommends several measures for the improvement of aerial photography and plotting of contour levels of wooded areas. Orig. art. has: 1 formula and 1 table. [JPRS]

SUB CODE: 08 / SUBM DATE: none

LS

Card 1/1



YUGOSLAVIA / Farm Animals. Honey Bee Q-7

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12215

Author : Tomashets Ivo
Inst :
Title : The Studies of the Effect of Antibiotics on Bees (Issledovaniya deystviya antibiotikov na pchel)

Orig Pub: Napr. pchelarstvo, 1957, 14, No 1-2, 10-12

Abstract: Investigational experiments established that by the treatment of European foul brood with antibiotics, the infection of young larvae is prevented and they develop better. Thereafter, the healthy bee families (in the hives and small cells) were fed terramycin, streptomycin and penicillin in sugar syrup and the results were evaluated after 3-4 weeks. Treatment with terramycin (13 families, 0.25 g. in one l. of syrup) produced no results. 10 families

Card 1/3

YUGOSLAVIA / Farm Animals. Honey Bee Q-7

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12215

Abstract: were receiving 0.4 g. of streptomycin in 1.5 l. of syrup, and 4 families 0.25 g. in one l. of syrup. The number of bees after the administration of streptomycin increased: in the group composed of 4 families, before the experiment, the bees were occupying, on the average, 15-1/2 each (controls - 10); there were 24 thousand (control - 28 thousand) cells with offspring, before the experiment, and thereafter 115 and 90 thousand, respectively. The honey crop increased. Less effective was the action of penicillin. The intestinal microflora of the bees in the cells was sharply changed by the antibiotics. After terramycin (0.02% was fed, the normal flora was absent and the fungi developed abundantly. After the administration of streptomycin (0.02%), minute bacteria, particularly Euridyce,

Card 2/3

YUGOSLAVIA / Farm Animals, Honey-Bees Q-9

Abs Jour: Ref Zhur-Biol., No 2, 1958, 7274

Author : Ivo Tomashets
Inst : Not given
Title : Essential Principles Of the Fight Against Principal Infectious Diseases Of Bees

Orig Pub: Pcela, 1957, No 4, 57-61 (Serbo-Khorv.)

Abstract: The Nosema disease is widespread in Yugoslavia. "Nosemak" (3 tablets to 3 liters of syrup) is used for the treatment of this disease. Methods of biological control include the elimination of infected bees (an increase in the number of cleansing flights, better collection of honey) and the breeding of a larger number of young bees (a young and efficient queen-bee, balanced supplementary feed). The fight against "acara-

Card 1/2

TOMASHEV, A.

Decisions are determined by the circumstances. Pozh.delo 7 no.5: 19-21 My '61. (MIRA 14:5)

1. Zamestitel' nachal'nika Upravleniye pozharnoy okhrany Ministerstva vnutrennikh del RSFSR.
(Fire extinction)

TOMASHEV, A.; RYABOV, I.; LYASHED'KO, M.

Experiments continue; experiments in fire extinction of lumber piles. Pozh. delo 6 no. 11:20-21 N '60. (MIRA 13:12)

1. Zamestitel' nachal'nika Upravleniya pozharnoy okhrany RSFSR (for Tomashev). 2. Zamestitel' nachal'nika TSentral'nogo nauchno-issledovatel'skogo instituta protivopozharnoy oborony (for Ryabov). 3. Nachal'nik Upravleniya pozharnoy okhrany Arkhangel'skogo oblispolkoma (for Lyashed'ko).

(Lumber yards--Fires and fire prevention)

BOBIN, K.P.; GERASIMOV, N.S.; GOLUBEV, S.G.; DEMIDOV, P.G.; DEM'YANENKO, M.P.; YEVTYUSHKIN, N.M.; ZEMSKIY, M.I.; KALASHNIKOV, K.A.; KONCHAYEV, B.I.; KOROLEV, A.I.; KRZHIZHANOVSKIY, P.I.; KULAKOV, G.M.; POLOSUKHIN, M.N.; ROYTMAN, M.Ya.; RUMYANTSEV, V.I.; SEMUSHKIN, B.V.; SMUROV, A.N.; TARASOV-AGAKOV, N.A.; TOMASHEV, A.I.

Semen Vasil'evich Kaliaev; obituary. Pozh. delo 4 no.5:29 My '58. (Kaliaev, Semen Vasil'evich, 1904-1958) (MIRA 11:5)

TOMASHEV, B.I. (Orel)

Establishing the rules of operation of arithmetical radicals.
Mat. v shkole no.3:60-61 My-Je '61. (MIRA 14:5)
(Roots, Numerical)

TOMASHEV, R.I. (Orel).

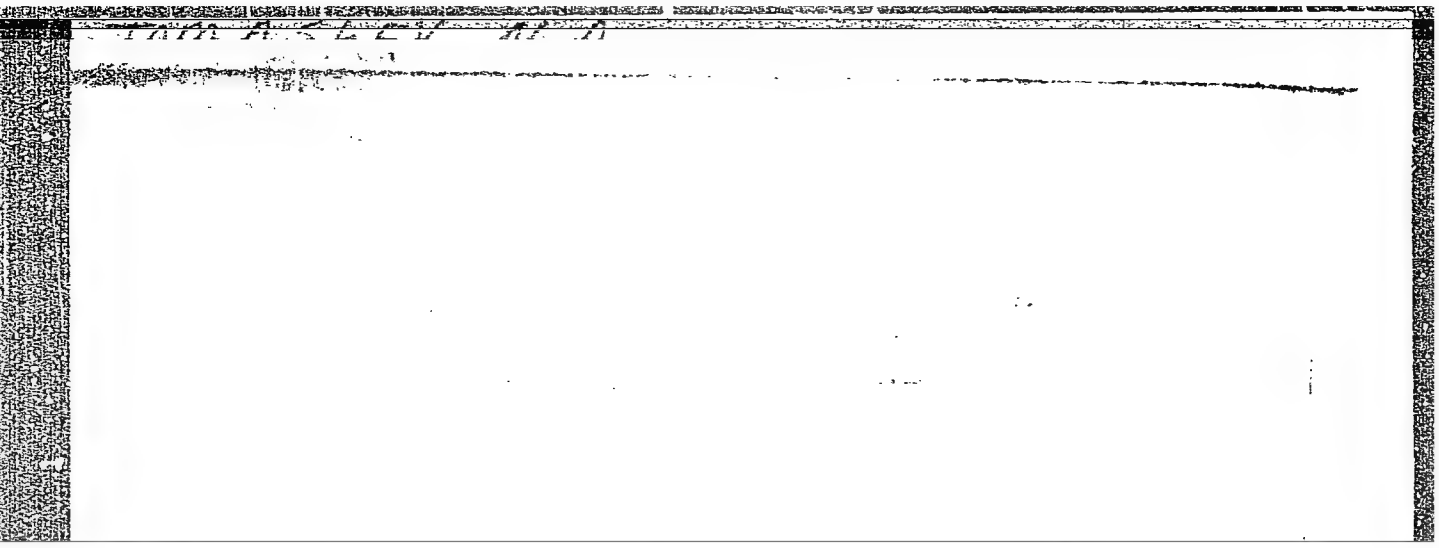
Solving irrational equations in the 8th class. Mat.v shkole no.1:49-53 Ja-F '57. (MLRA 10:2)
(Equations--Study and teaching)

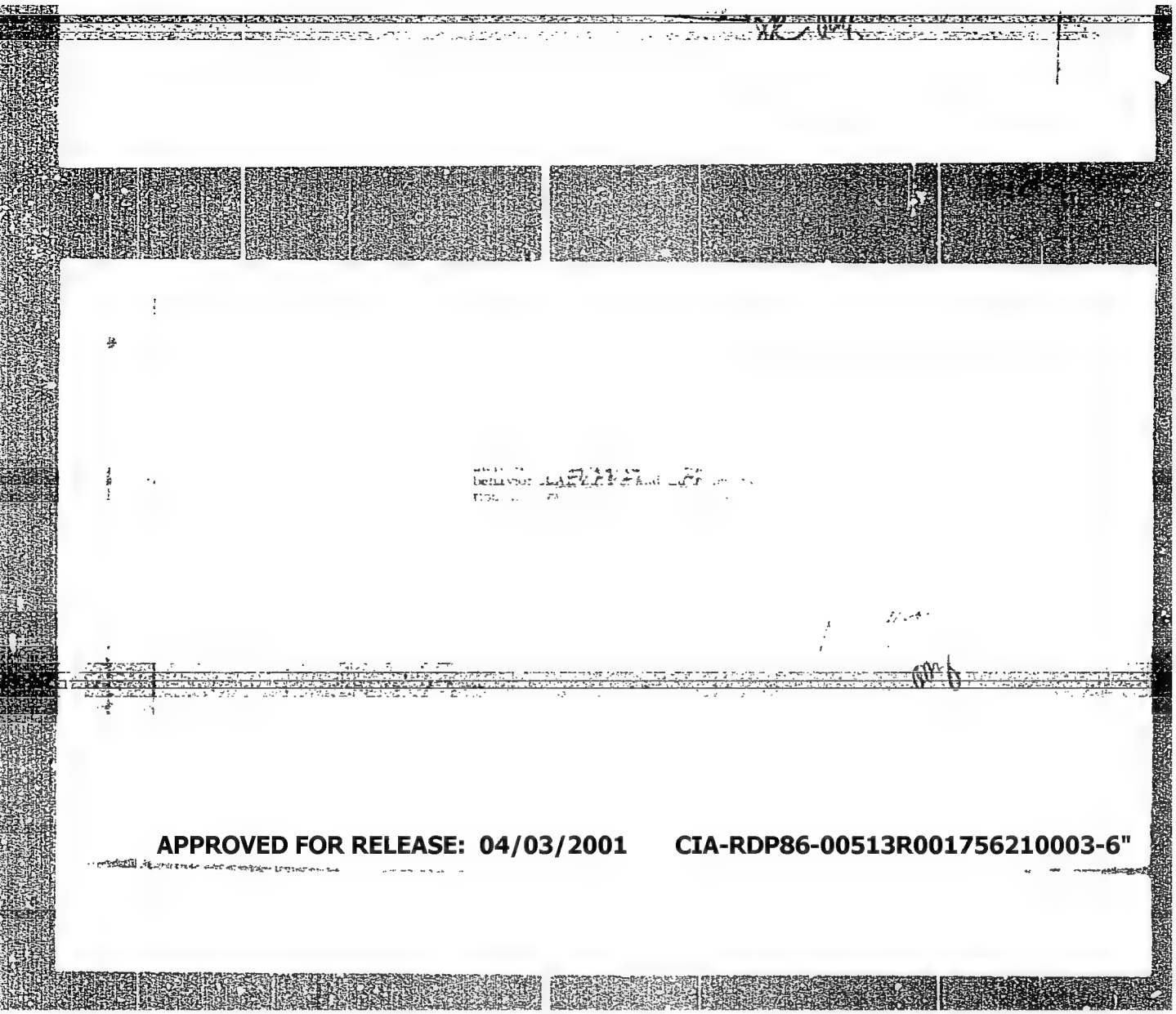
TOMASHEV, N.D.; AL'TOVSKIY, P.M.; ARAKELOV, A.G.

Anodic protection of titanium in sulphuric acid. Dokl. AN SSSR 121 no. 5:885-888 Ag '58. (MIRA 11:10)

1. Institut fizicheskoy khimii AN SSSR. Predstavleno akademikom P.A.Rebinderom.

(Titanium)
(Corrosion and anticorrosives)





TOMASHEV, Nikon Danilovich; CHERNOVA, Galina Prokof'yevna; YEGOROV, N.G., red.

[Passivity and the protection of metals against corrosion] Passivnost' i zashchita metallov ot korrozii. Moskva, Nauka, 1965. 207 p. (MIRA 18:8)

TOMASHEV, N.N.

Revolving prism. Fiz.v shkole no.6:63-64 '53. (MLRA 6:10)

1. Moscow, Nizlorodno-svarochnyy tekhnikum. (Prisms)

KEDRIN, Ye.; TOMASHEV, Z.

Orders for leather footgear should be based on estimates. Sov. torg. 35 no.2:5-7 F '61. (MIRA 14:3)
(Shoe industry)
(Retail trade)

TOMASHEVICH, A.

"Night Operations of Submarines," Morskoy Sbornik, Official Journal of the Soviet Fleet, n 23/24, 1939, p. 73-76.

Tomashevich, A.V.

LEVCHENKO, G.I., admiral, otvetstvennyy red.; DEMIN, L.A., dots., kand. geogr. nauk, inzh.-kontr-admiral, glavnyy red.; FRUMKIN, N.S., polkovnik, zamestitel' otvetstvennogo red.; ABAN'KIN, P.S., admiral, red.; ALAFUZOV, V.A., prof., kand. voenno-morskikh nauk, admiral, red.; ANAN'ICH, V.Ye., kontr admiral zapasa, red.; ACHKASOV, V.I., kand. istor. nauk, kapitan 1 ranga, red.; BARANOV, A.N., red.; BELLI, V.A., prof., kontr-admiral v otstavke, red.; BESKROVNYY, L.G., prof., doktor istor. nauk, polkovnik zapasa, red.; BOLTIN, Ye.A., kand. voen. nauk, general-mayor, red.; VERSHININ, D.A., kapitan 1 ranga, red.; VITVER, I.A., prof., doktor geogr. nauk, red.; GEL'FOND, G.M., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red., GLINKOV, Ye.G., inzh.-kontr-admiral v otstavke, red.; YELISEYEV, I.D., vitse-admiral, red.; ZOZULYA, F.V., admiral, red.; ISAKOV, I.S., prof., Admiral Flota Sovetskogo Soyuza, red.; KAVRAYSKIY, V.V. [deceased], prof., doktor fiz.-mat. nauk, inzh.-kontr-admiral v otstavke, red.; KALESNIK, S.V., red.; KOZLOV, I.A., dots. kand. voenno-morskikh nauk, kapitan 1 ranga, red.; KOMAROV, A.V., vitse-admiral, red.; KUDRYAVTSEV, M.K., general leytenant tekhnicheskikh voysk, red.; LYUSHKOVSKIY, M.V., dots., kand. istor. nauk, polkovnik, red.; MAKSIMOV, S.N., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; OKUN', S.B., prof., doktor istor. nauk, red.; ORLOV, B.P., prof., doktor geogr. nauk, red.; PAVLOVICH, N.B., prof., kontr-admiral v otstavke, red.; PANTELEYEV, Yu.A., admiral, red.; PITERSKIY, N.A., kand. voenno-morskikh nauk, kontr-admiral, red.; PLATONOV, S.P., general-leytenant, red.; POZNYAK, V.G., dots., general leytenant, red.; SALISHCHEV, K.A., prof., doktor tekhn. nauk,

(Continued on next card)

LEVCHENKO, G.I.--(continued) Card 2.

red.; SIDOROV, A.L., prof., doktor istor. nauk., red.; SKORODUMOV, L.A., kontr-admiral, red.; SHEZHINSKIY, V.A., prof., doktor voenno-morskikh nauk, inzh.-kapitan 1 ranga, red.; SOLOV'YEV, I.N., dots., kand. voenno-morskikh nauk, kapitan 1 ranga, red.; STALBO, K.A., kontr-admiral, red.; STEPANOV, G.A. [deceased], dots., vitse-admiral, red.; TOMASHEVICH, A.V., prof., doktor voenno-morskikh nauk, kontr-admiral v otstavke, red.; TRIBUTS, V.F., kand. voenno-morskikh nauk, admiral, red.; CHERNYSHOV, F.I., kontr-admiral, red.; SHVEDE, Ye.Ye., prof. doktor voenno-morskikh nauk, kontr-admiral, red.; CHUBBAKOV, A.I., tekhn. red.; VASIL'YEVA, Z.P., tekhn. red.; VIZIROVA, G.N., tekhn. red.; GOROKHOV, V.I., tekhn. red.; GRIN'KO, A.M., tekhn. red.; KUBLIKOVA, M.M., tekhn. red.; MALIKKO, V.I., tekhn. red.; SVIDERSKAYA, G.V., tekhn. red.; CHERNOGOROVA, L.P., tekhn. red.; GUREVICH, I.V., tekhn. red.; BUKHANOVA, N.I., tekhn. red.; NIKOLAYEVA, I.N., tekhn. red.; RADOVIL'SKAYA, E.O., tekhn. red.; TIKHOMIROVA, A.S., tekhn. red.; BELOCHKIN, P.D., tekhn. red.; LOYKO, V.I., tekhn. red.; ROMANYUK, I.G., tekhn. red.; YAROSHEVICH, K.Ye., tekhn. red.

[Sea atlas] Morskoi atlas. Otv. red. G.I. Levchenko. Glav. red. L.A. Demin. [Moskva] Izd. Glav. shtaba Voenno-morskogo flota. Vol.3. [Military and historical. Pt.1. Pages 1-45] Voenno-istoricheskii. Zamestitel' otv. red. po III tomu N.S. Frumkin. Pt.1. Listy 1-45. 1958. _____ [Military and historical maps, pages 46-52]

(Continued on next card)

LEVCHENKO, G.I.---(continued) Card 3.
Voenno-istoricheskie karty, listy 46-52. 1957. (MIRA 11:10)

1. Russia (1923- U.S.S.R.) Ministerstvo oborony. 2. Nachal'nik Glavnogo upravleniya geodezii i kartografii Ministerstva vnutrennikh del SSSR (for Baranov). 3. Chlen-korrespondent Akademii nauk SSSR (for Kalesnik). 4. Deystvitel'nyy chlen Akademii pedagogicheskikh nauk RSFSR (for Orlov).
(Ocean--Maps)

PHASE I BOOK EXPLOITATION SOV/5259

Tomashevich, Dmitriy Lyudvigovich

Konstruktsiya i ekonomika samoleta (Aircraft Design and Economics) Moscow, Oborongiz, 1960. 201 p. Errata slip inserted. 2,600 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR.

Ed.: A. A. Goryainov, Candidate of Technical Sciences, Ed. of Publishing House: S. I. Vinogradskaya, Tech. Ed.: N. A. Pukhlikova, Managing Ed. of Publishing House: A. S. Zaymovskaya, Engineer.

PURPOSE: This book is intended for aircraft industry engineers.

COVERAGE: The book contains theoretical fundamentals and formulas for evaluating aircraft from the economy point of view. Application of these formulas will make possible selection of aircraft

Card 1/9

designs and parameters that minimize production and operation costs and that will safeguard, at the same time, the optimum required characteristics of the aircraft. Chapters 2-9 and 22, and numerical examples are based on data on non-Soviet various-purpose aircraft. The author thanks D. P. Andrianov, I. T. Belyakov, V. V. Boytsov, Yu. M. Brodyanskiy, D. V. Golyayev, B. T. Goroshchenko, B. V. Zaslavskiy, I. B. Kuksin, L. M. Kul'-berg, K. A. Malkov, V. P. Sokolov, B. N. Tarasevich, Yu. D. Urlapov, N. N. Fadeyev, L. S. Chernobrovkin. There are 5 references: 4 Soviet (including 1 translation) and 1 English.

TABLE OF CONTENTS:

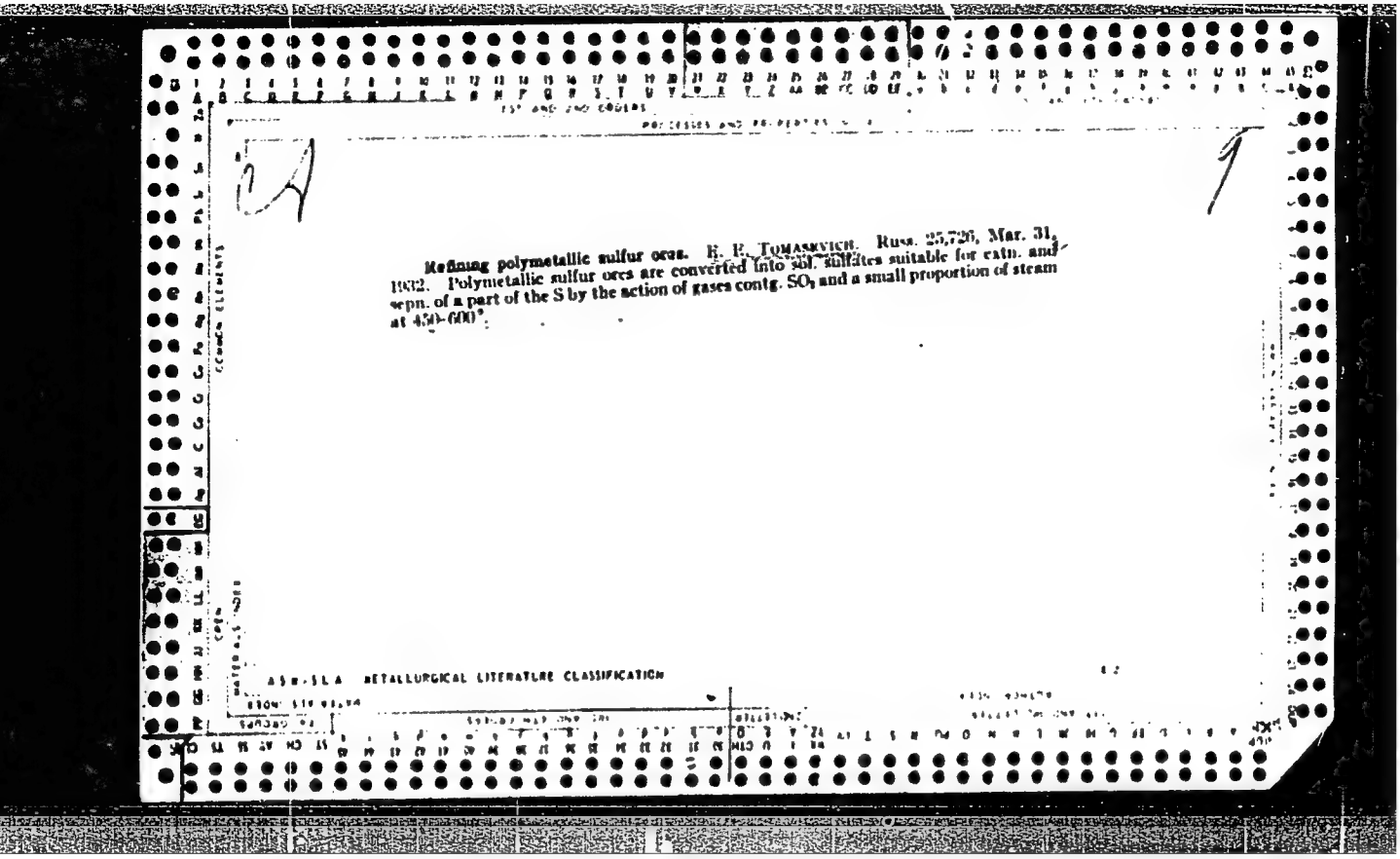
LEBEDEV, Aleksandr Aleksandrovich, doktor tekhn. nauk, prof.; CHERNOBROVKIN, Lev Semenovich; TKACHENKO, Ya.Ye., retsenzent; TOMASHEVICH, D.L., doktor tekhn. nauk, retsenzent; KHEYFETS, N.A., doktor tekhn. nauk, retsenzent; GORTSUYEVA, N.A., red. izd-va; ROZHIN, V.P., tekhn. red.

[Dynamics of the flight of pilotless aircraft]Dinamika poleta bespilotnykh letatel'nykh apparatov. Pod red. A.A.Lebedeva. Moskva, Oborongiz, 1962. 548 p. (MIRA 15:12)
(Aerodynamics) (Guided missiles)

TOMASHEVICH, D. N., Docent Cand. Tech. Sci.

Dissertation: "On Design of Airplane Parts Considering the Factors of Strength, Weight and Cost." Military Red Banner Order of Lenin Aeronautical Engineering Academy imeni Prof. N. Ye. Zhukovskiy, 23 Apr 47.

SO: Vechernyaya Moskva, Apr, 1947 (Project #17836)



Refining polymetallic sulfur ores. E. P. TOMASHEVICH. Russ. 25,726, Mar. 31, 1932. Polymetallic sulfur ores are converted into sol. sulfates suitable for extn. and sepn. of a part of the S by the action of gases contg. SO_3 and a small proportion of steam at 450–600°.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

TOMASHEVICH, G.N., inzhener; UCHASTKINA, Z.V., kandidat tekhnicheskikh nauk.

Fluorescence analysis of paper. Bum.prom. 30 no.1:15-17 Ja '55. (MLRA 8:3)
(Paper--Testing)

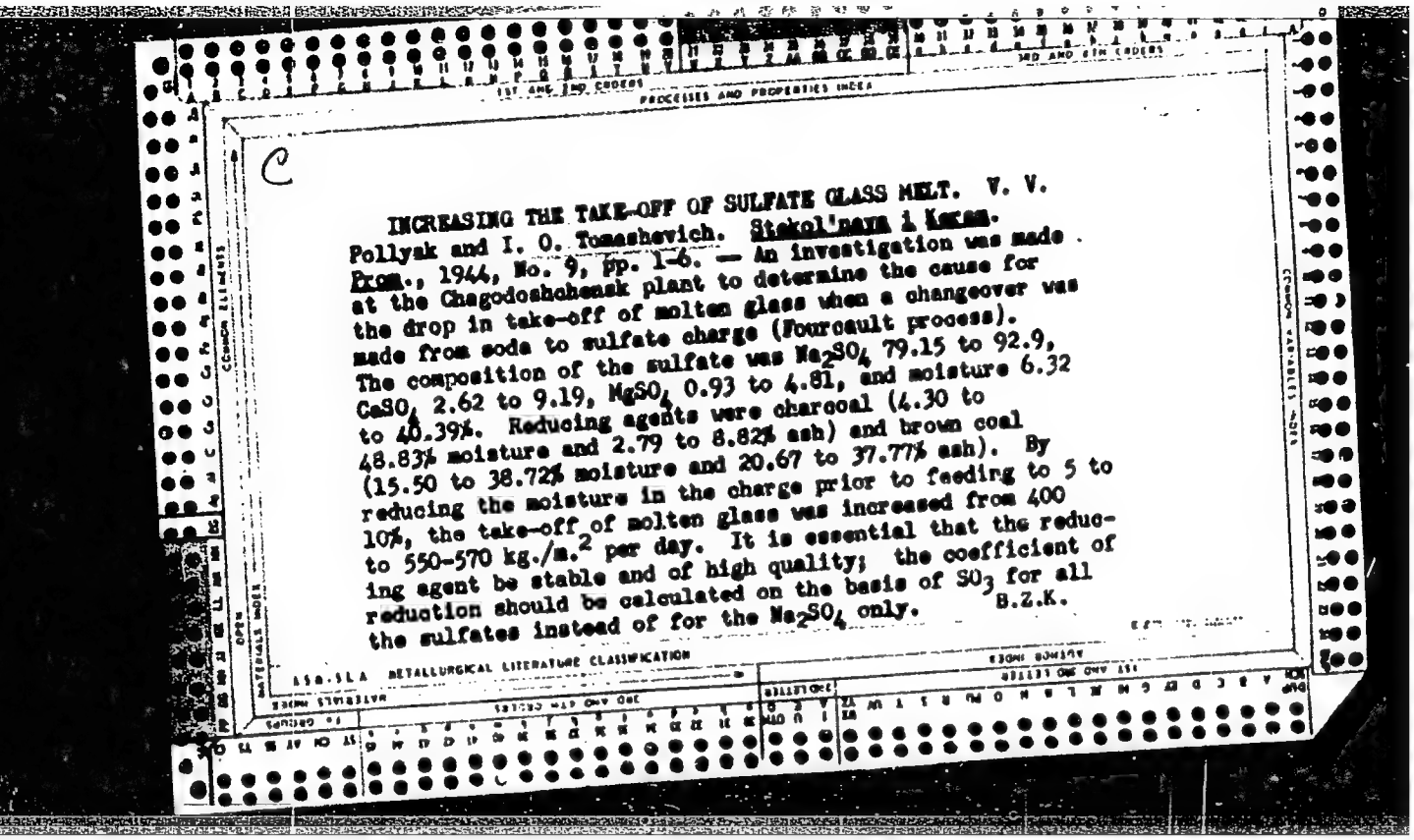
TOMASHEVICH, G.N.; ZERNOVA, A.B.

Chemistry and restoration. Priroda 52 no.6:104-106 '63.
(MIRA 16:6)

1. Gosudarstvennaya tsentral'naya khudozhestvenno-restavratsionnaya masterskaya, Moskva.
(Art objects--Conservation and restoration)

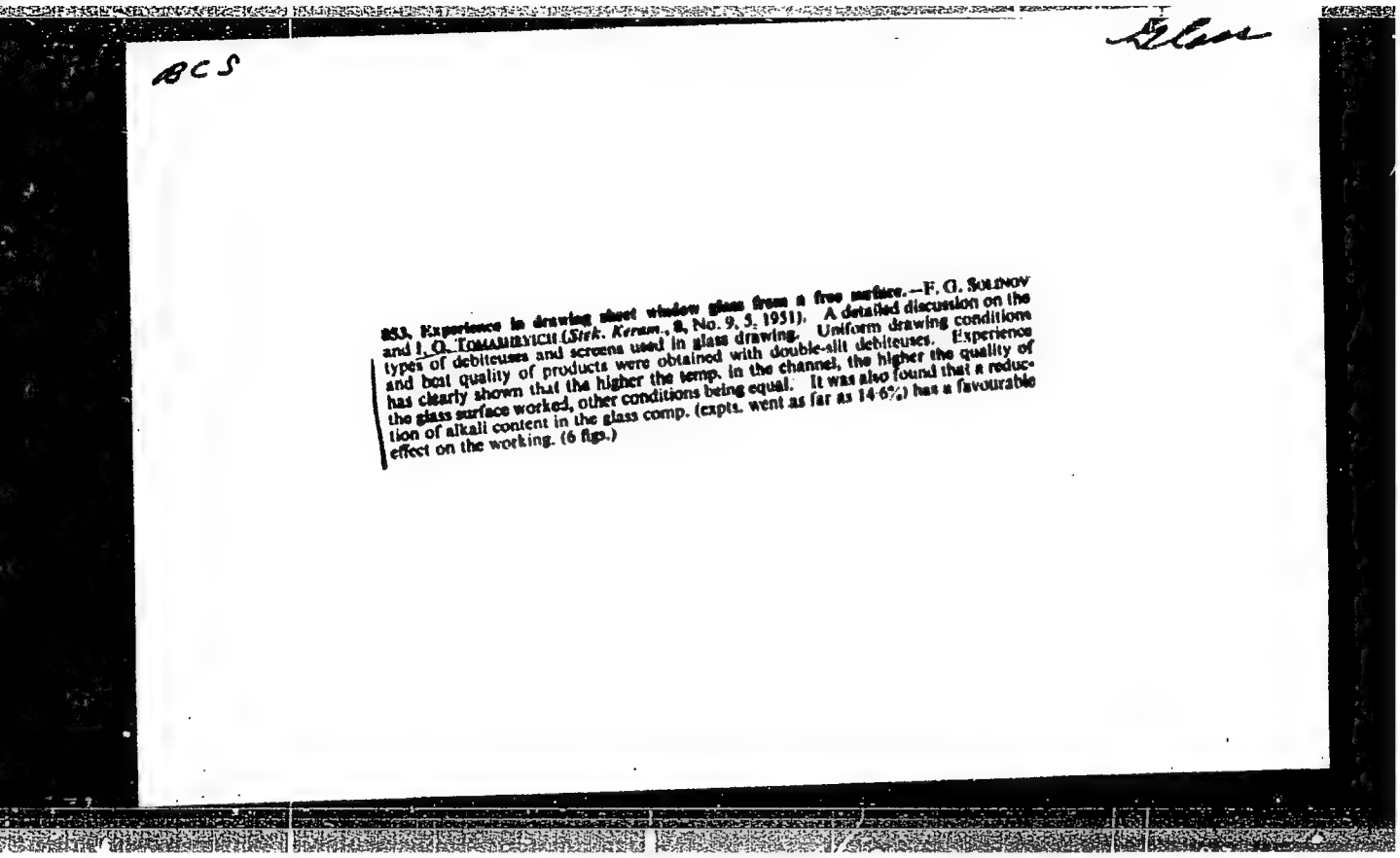
KOVAL', V.G.; TOMASHEVICH, G.S.; KOROVENKOVA, A.I.; AREF'YEVA, L.M.

Correcting the norms for alcohol losses during the aging of liqueurs. Trudy Ukr.NIISP no.8:132-136 '63. (MIRA 17:3)



C

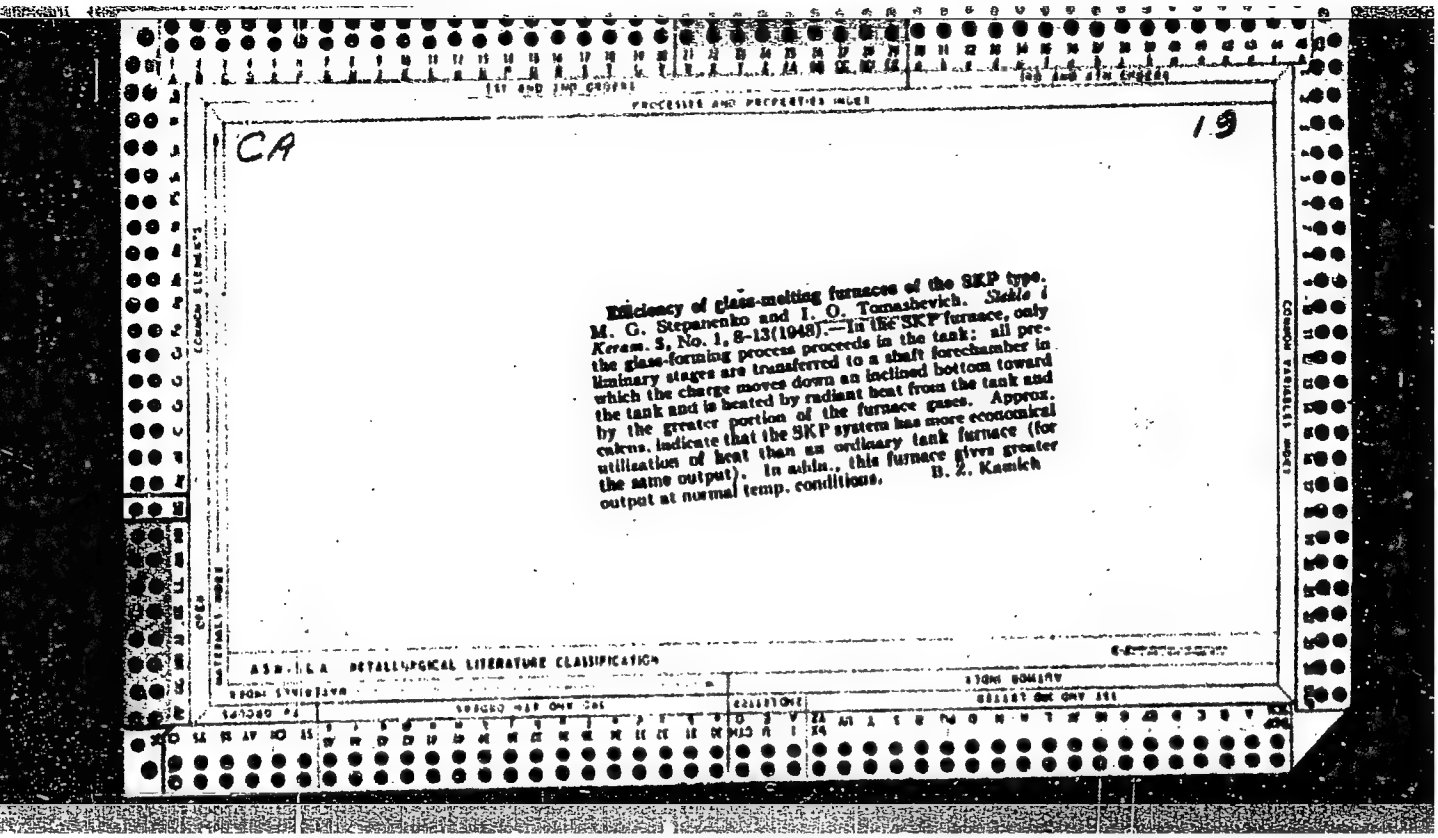
INCREASING THE TAKE-OFF OF SULFATE GLASS MELT. V. V. Pollyak and I. O. Tomashevich. Stekol'naya i Keram. Prom., 1944, No. 9, pp. 1-6. — An investigation was made at the Chagodoshchensk plant to determine the cause for the drop in take-off of molten glass when a changeover was made from soda to sulfate charge (Fourcault process). The composition of the sulfate was Na_2SO_4 79.15 to 92.9, $CaSO_4$ 2.62 to 9.19, $MgSO_4$ 0.93 to 4.81, and moisture 6.32 to 40.39%. Reducing agents were charcoal (4.30 to 48.83% moisture and 2.79 to 8.82% ash) and brown coal (15.50 to 38.72% moisture and 20.67 to 37.77% ash). By reducing the moisture in the charge prior to feeding to 5 to 10%, the take-off of molten glass was increased from 400 to 550-570 kg./m.^{2} per day. It is essential that the reducing agent be stable and of high quality; the coefficient of reduction should be calculated on the basis of SO_3 for all the sulfates instead of for the Na_2SO_4 only. B.Z.K.



BCS

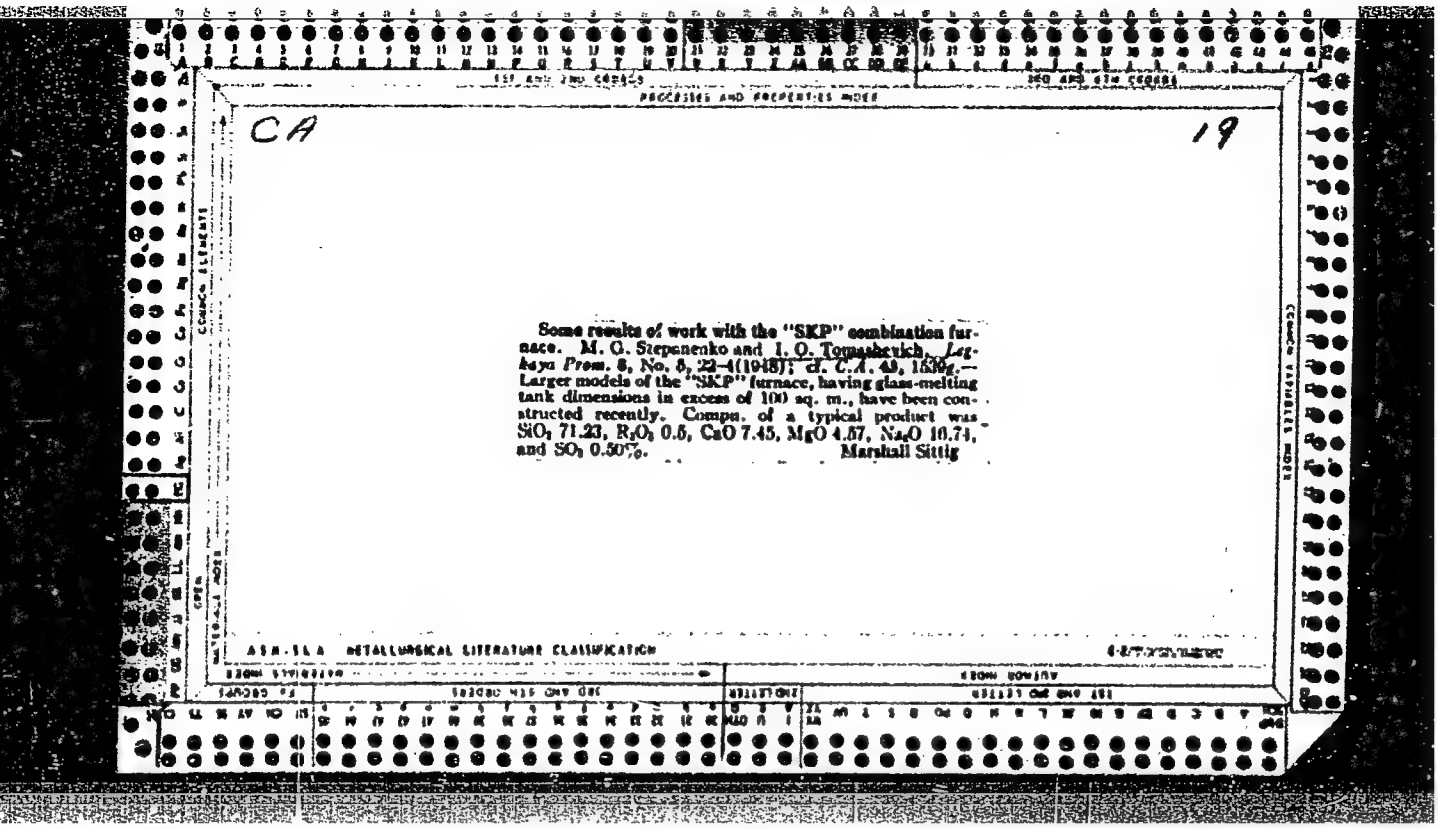
Glass

853. **Experience in drawing sheet window glass from a free surface.**—F. G. SOLDNOV and I. O. TOMASHEVICH (*Stek. Keram.*, 8, No. 9, 5, 1951). A detailed discussion on the types of debiteuses and screens used in glass drawing. Uniform drawing conditions and best quality of products were obtained with double-slit debiteuses. Experience has clearly shown that the higher the temp. in the channel, the higher the quality of the glass surface worked, other conditions being equal. It was also found that a reduction of alkali content in the glass comp. (expts. went as far as 14·6%) has a favourable effect on the working. (6 figs.)



CA 19

Efficiency of glass-melting furnaces of the SKP type. M. G. Stepanenko and I. O. Tomashevich. *Steklo i Keram.* 5, No. 1, 8-13(1948).—In the SKP furnace, only the glass-forming process proceeds in the tank; all preliminary stages are transferred to a shaft forechamber in which the charge moves down an inclined bottom toward the tank and is heated by radiant heat from the tank and by the greater portion of the furnace gases. Approx. calens. indicate that the SKP system has more economical utilization of heat than an ordinary tank furnace (for the same output). In addn., this furnace gives greater output at normal temp. conditions. B. Z. Kamich



CA 19

Some results of work with the "SKP" combination furnace. M. G. Stepanenko and I. O. Tomashevich. *Legkaya Prom.* 8, No. 8, 22–4(1948); cf. *C.A.* 43, 1530g.—Larger models of the "SKP" furnace, having glass-melting tank dimensions in excess of 100 sq. m., have been constructed recently. Compn. of a typical product was SiO_2 71.23, R_2O_3 0.5, CaO 7.45, MgO 4.57, Na_2O 16.74, and SO_3 0.50%.
Marshall Sittig

Tomashevich I.O.

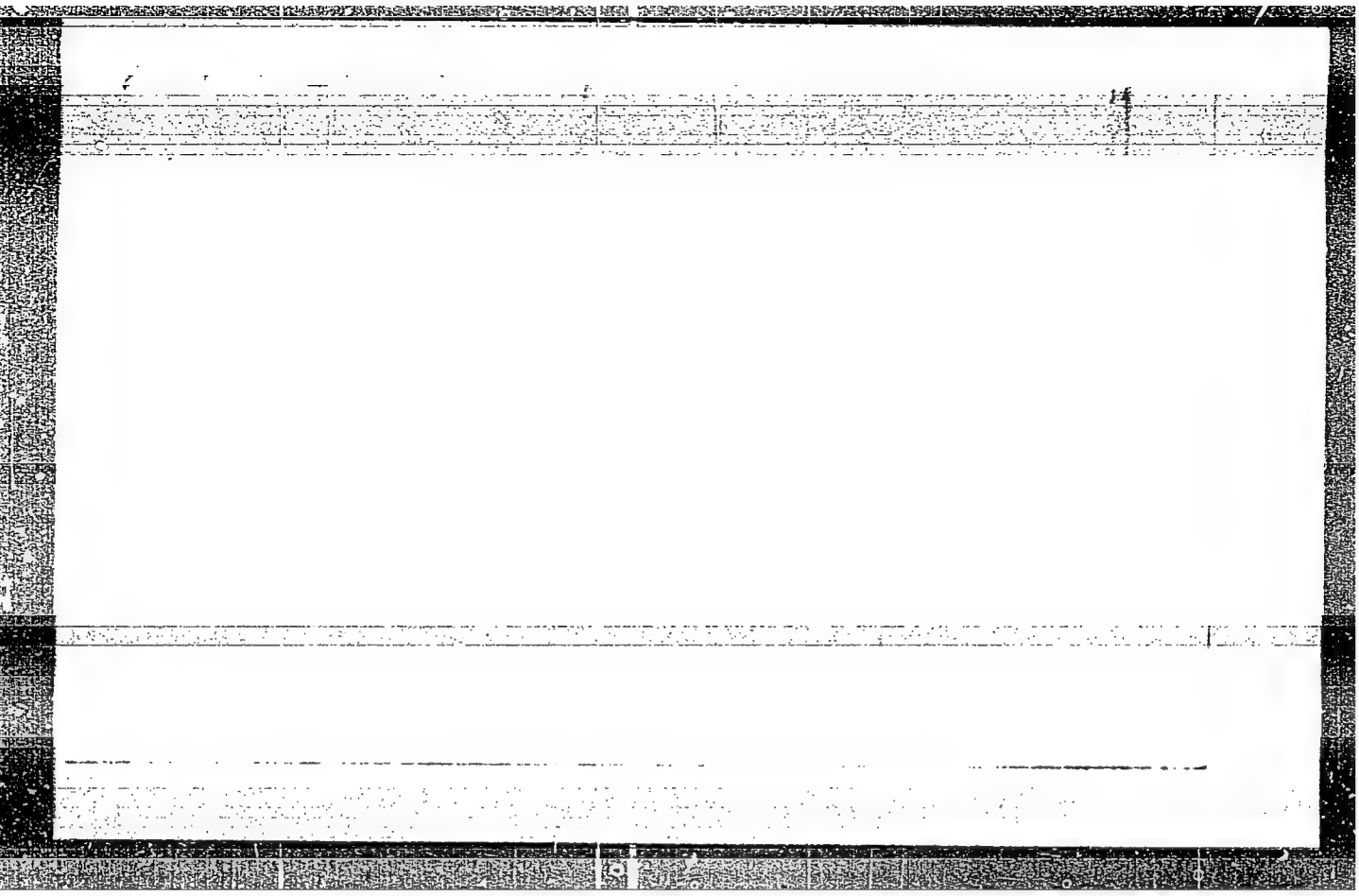
2657. The shaping of the edges of the glass ribbon during vertical drawing without floats. —I. D. TYKACHINSKII and I. O. TOMASHEVICH (*Glass & Ceramics*, Moscow, 11, No. 5, 7, 1954). (6 pp. 10 figs.)

TOMASHEVICH, I. G.

USSR

Role of a float in the production of sheet glass without a debiteuse. I. G. Tomashevich. *Nauch.-Tekh. Byull. Vsesoyuz. Nauch.-Issledovat. Inst. Stekla* 1953, No. 5, 3-9; *Referat. Zhur., Khim.* 1954, No. 36567.—The importance of size, shape, and installation of the float in this process is discussed.

M. Hosch



APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R001756210003-6"

Tomashewich, I. O.

Design of machine channel for vertical drawing of sheet glass without debiteuse. I. O. TOMASHEVICH AND I. D. TYRACHINSKII. *Steklo i Keram.*, 11[3?]17-21[1954].—Experience gained during recent years in the vertical drawing of sheet glass without a debiteuse is reviewed.

B.Z.K.

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(1)

TOMASHEVICH

Edge formation of sheet glass drawn vertically without debiteuse. I. D. TYKACHINSKII AND I. O. TOMASHEVICH. *Steklo i Keram.*, 11 [5] 7-12 (1954) -Experience with edge-forming devices and edge holders at the L'vov Glass Works is presented. B.Z.K.

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(1)

TOMASHEVICH, I.O.

USSR/ Engineering - Glass drawing

Card 1/1 Pub. 104. - 6/9

Authors : Tomashevich, I. O., and Tykachinskiy, I. D.

Title : Construction of a machine bed for vertical drawing of plate glass

Periodical : Stek. i ker. 2, 17-21, Feb 1954

Abstract : The report presents a generalization of accumulated experimental data on the adaption of the boatless method for vertical drawing of plate glass. The advantages of this method are listed, as well as the difficulties which have to be ironed out before the method can be put to practical application. The introduction of boatless glass drawing (vertical drawing through a specially designed machine bed), is considered one of the main contributions to the quality improvement of window and technical glass. Plans for such machine bed arrangement are included. One USSR reference (1952). Diagrams; drawings.

Institution: .....

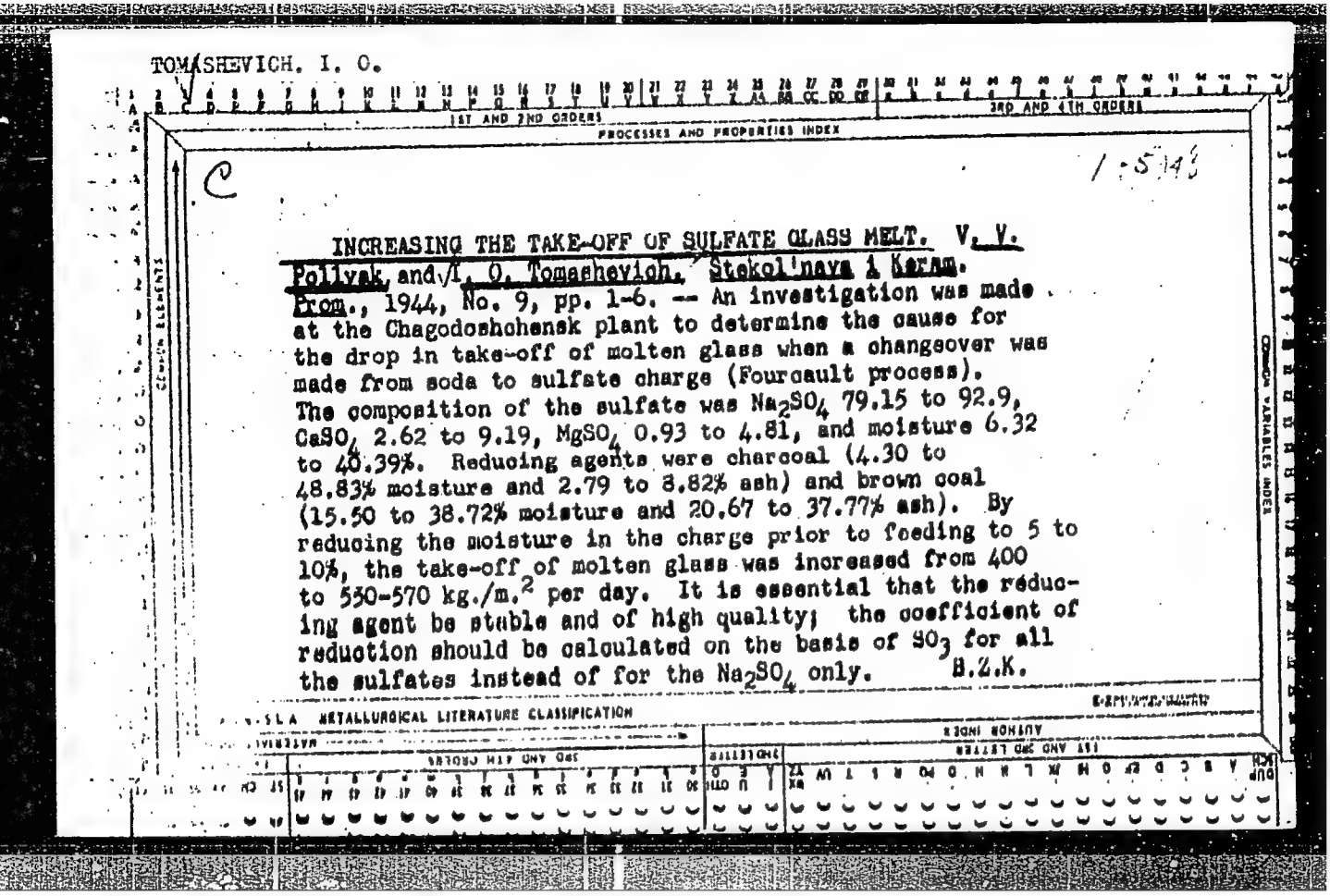
Submitted: .....

(2)

10745* (Shaping the Edges of Sheet Glass in Floatless Vertical Drawing.) *Formovanie hrán tabuľového skla pri bezplavákovom vertikálnom vyťahovaní.* I. D. Tykachinskii and I. O. Tomashevich. *Sklo i Keramika,* v. 11, no. 5, May 1954, p. 7-12.

Increased capacity by edge forming plates and rollers. Diagrams.

11-8-54



TOMASHEVICH, I. O.

C

1-5143

INCREASING THE TAKE-OFF OF SULFATE GLASS MELT. V. V. Pollyak and I. O. Tomashevich. Stekol'naya i Keram. Prom., 1944, No. 9, pp. 1-6. -- An investigation was made at the Chagodoshchensk plant to determine the cause for the drop in take-off of molten glass when a changeover was made from soda to sulfate charge (Fourcault process). The composition of the sulfate was Na_2SO_4 79.15 to 92.9, $CaSO_4$ 2.62 to 9.19, $MgSO_4$ 0.93 to 4.81, and moisture 6.32 to 40.39%. Reducing agents were charcoal (4.30 to 48.83% moisture and 2.79 to 8.82% ash) and brown coal (15.50 to 38.72% moisture and 20.67 to 37.77% ash). By reducing the moisture in the charge prior to feeding to 5 to 10%, the take-off of molten glass was increased from 400 to 550-570 kg./m.^{2} per day. It is essential that the reducing agent be stable and of high quality; the coefficient of reduction should be calculated on the basis of SO_3 for all the sulfates instead of for the Na_2SO_4 only. B.Z.K.

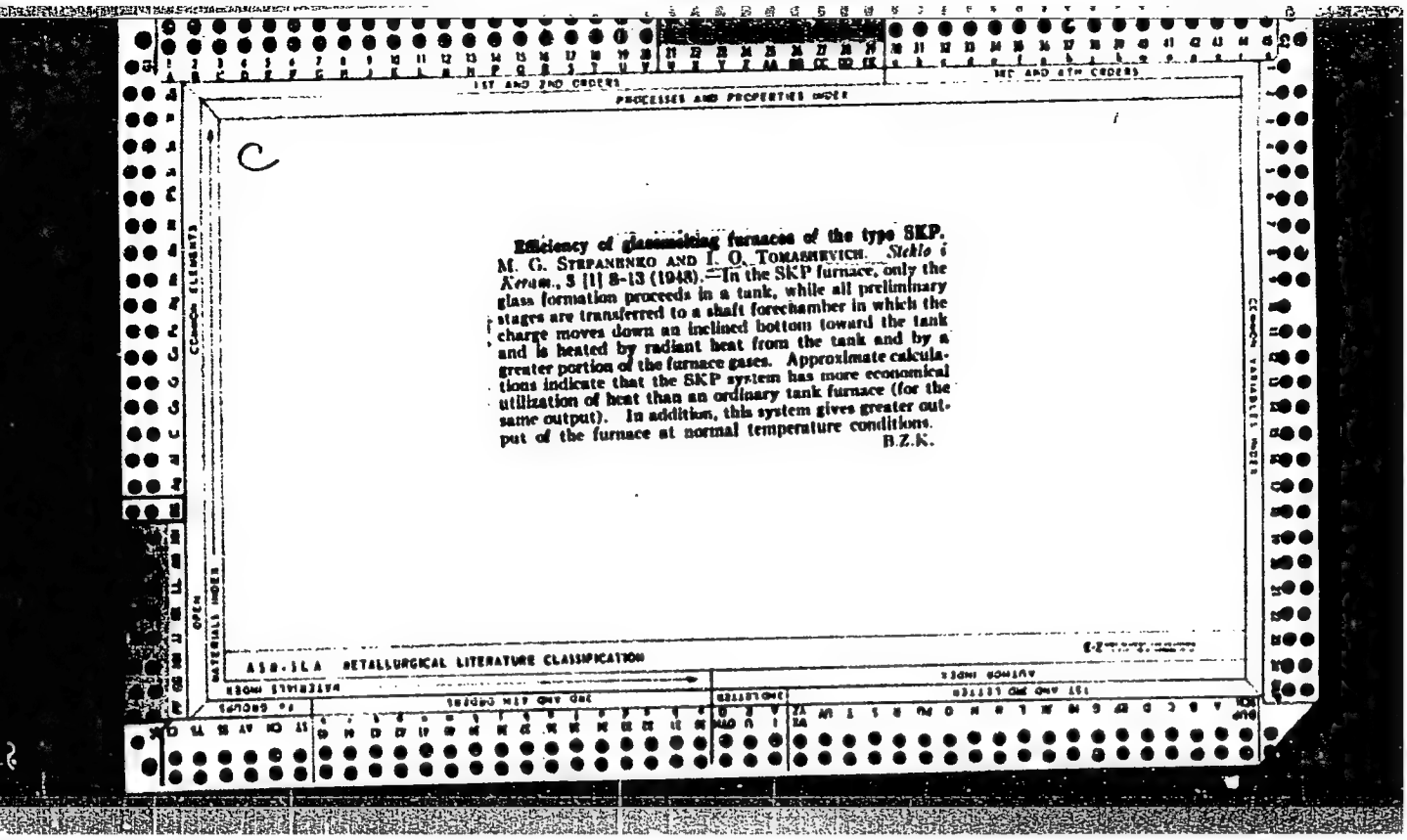
TOMASHEVICH, I. O.

PROCESSES AND PROPERTIES INDEX

Efficiency of glassmelting furnaces of the type SKP. M. G. Stepanenko and I. O. Tomashevich. *Steklo i Keram.*, 8 [1] 8-10 (1951). —In the SKP furnace, only the glass formation proceeds in a tank, while all preliminary stages are transferred to a shaft forechamber in which the charge moves down an inclined bottom toward the tank, and is heated by radiant heat from the tank and by a greater portion of the furnace gases. Approximate calculations indicate that the SKP system has more economical utilization of heat than an ordinary tank furnace (for the same output). In addition, this system gives greater output of the furnace at normal temperature conditions.

R.Z.K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

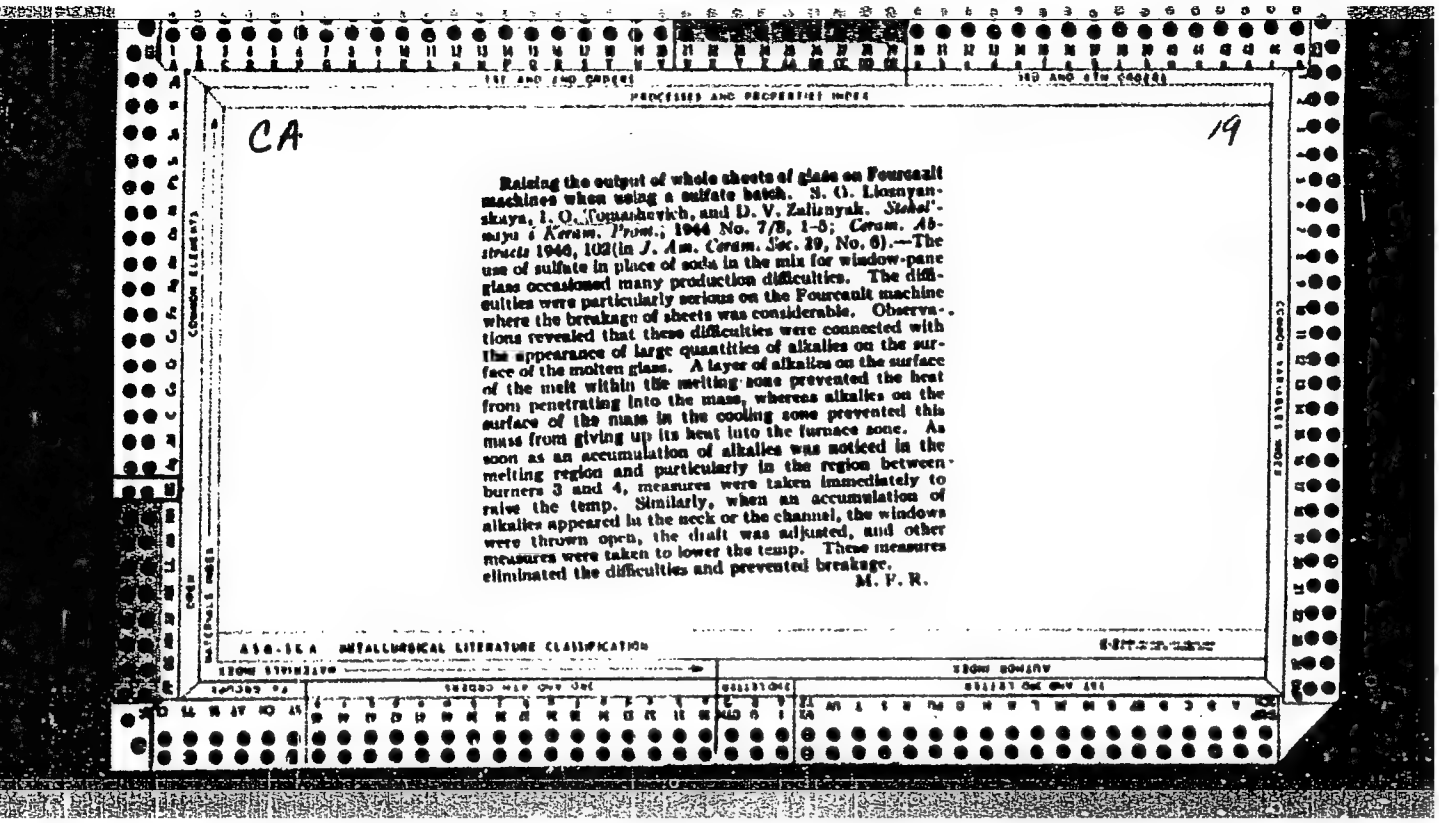


Efficiency of glass-melting furnaces of the type SKP. M. G. Stepanenko and I. O. Tomashevich. *Steklo i Keram.*, 5 [1] 8-13 (1948).—In the SKP furnace, only the glass formation proceeds in a tank, while all preliminary stages are transferred to a shaft forechamber in which the charge moves down an inclined bottom toward the tank and is heated by radiant heat from the tank and by a greater portion of the furnace gases. Approximate calculations indicate that the SKP system has more economical utilization of heat than an ordinary tank furnace (for the same output). In addition, this system gives greater output of the furnace at normal temperature conditions.
B.Z.K.

TOMASHEVICH, I.O.; TYKACHINSKIY, I.D.

Construction of the drawing channel for vertical drawing of sheet glass without the use of a refractory boat. Stek.i ker.11 no.2:17-21 F '54. (MLRA 7:1)

(Glass manufacture)



CA 19

Raising the output of whole sheets of glass on Fourcault machines when using a sulfate batch. S. O. Lisenyanskaya, I. O. Tomashevich, and D. V. Zalisnyak. *Steklo i Keram. Prom.*, 1944 No. 7/8, 1–5; *Ceram. Abstracts* 1946, 102(in *J. Am. Ceram. Soc.* 29, No. 6).—The use of sulfate in place of soda in the mix for window-pane glass occasioned many production difficulties. The difficulties were particularly serious on the Fourcault machine where the breakage of sheets was considerable. Observations revealed that these difficulties were connected with the appearance of large quantities of alkalies on the surface of the molten glass. A layer of alkalies on the surface of the melt within the melting zone prevented the heat from penetrating into the mass, whereas alkalies on the surface of the mass in the cooling zone prevented this mass from giving up its heat into the furnace zone. As soon as an accumulation of alkalies was noticed in the melting region and particularly in the region between burners 3 and 4, measures were taken immediately to raise the temp. Similarly, when an accumulation of alkalies appeared in the neck or the channel, the windows were thrown open, the draft was adjusted, and other measures were taken to lower the temp. These measures eliminated the difficulties and prevented breakage.

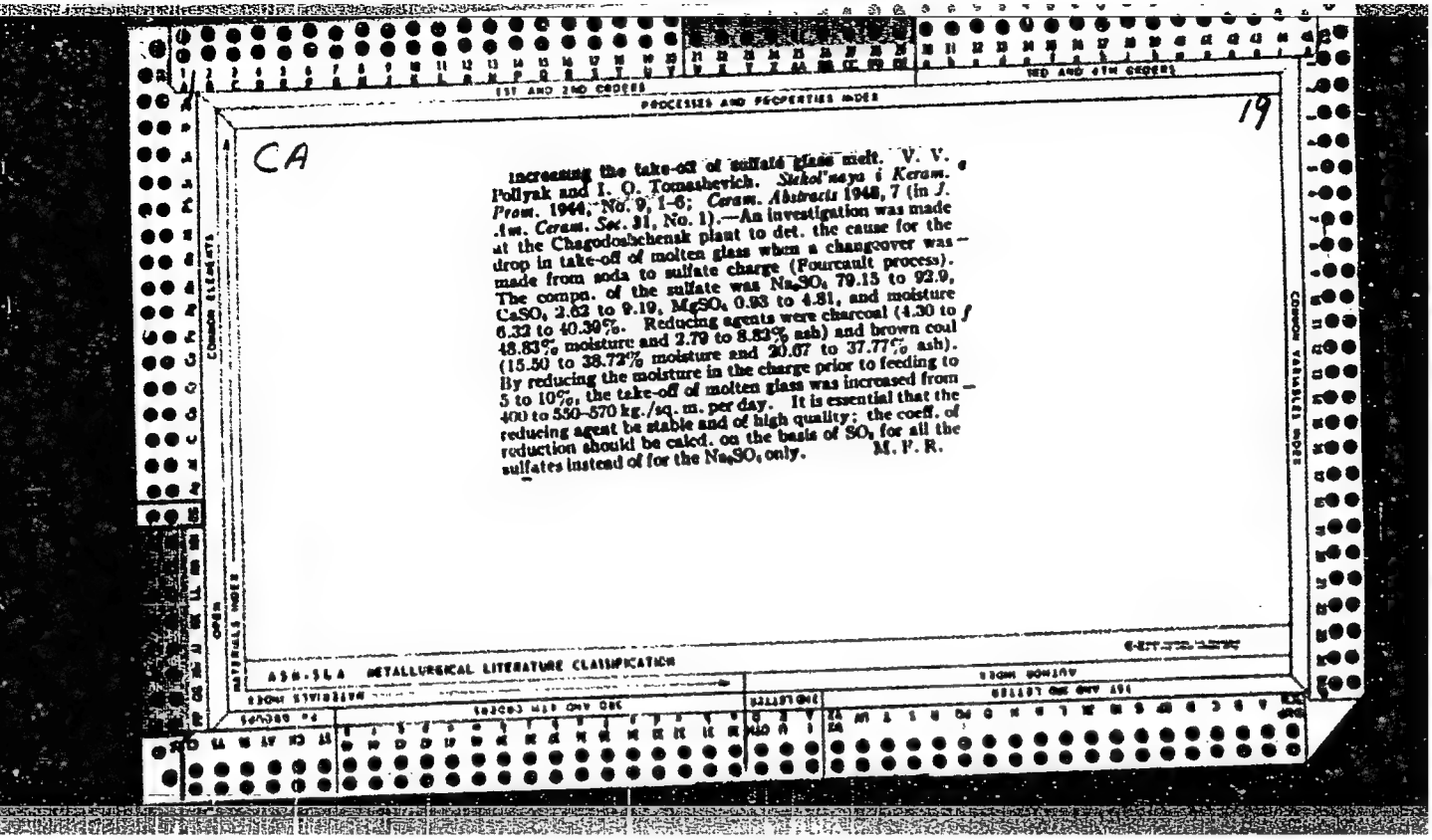
M. F. R.

A.C.S

Glass

Raising the output of whole sheets of glass on Fourcault machines when using a sulfate batch. S. G. LISSENTAIA, I. O. TOMASHEVICH, AND D. V. ZALIESNAK. *Steklo i Keram. Prom.*, 1944, No. 7/8, pp. 1-5.—The use of sulfate in place of soda in the mix for window-pane glass has caused many production difficulties. This change necessitated the revision and adjustment of many operations. The difficulties were particularly serious on the Fourcault machine where the breakage of sheets was considerable. The breakage was manifestly attributable to either overheating or overcooling of the sheet, and yet the temperatures measured at the usual places seemed to be quite normal. Observations revealed that these difficulties were connected with the appearance of large quantities of alkalis on the surface of the molten glass. A layer of alkalis on the surface of the melt within the melting zone prevented the heat from penetrating into the mass, whereas alkalis on the surface of the mass in the cooling zone prevented this mass from giving up its heat into the furnace zone. In the first case the glass is too cold; in the second it is overheated. In the plant discussed the situation was aggravated by the fact that no debitenses were used. Their presence usually stops the alkalis and prevents their entry into the middle channel. The temperature readings of the usual instruments did not suffice for surmounting these difficulties, and other methods had to be used. As soon as an accumulation of alkalis was noticed in the melting region and particularly in the region between burners 3 and 4, measures were taken immediately to raise the temperature. Similarly, when an accumulation of alkalis appeared in the neck or the channel, the windows were thrown open, the draft was adjusted, and other measures were taken to lower the temperature. These measures eliminated the difficulties and prevented breakage.

M.Ho.



PROCESSES AND PROPERTIES INDEX

19

CA

increasing the take-off of sulfate glass melt. V. V. Pollyak and I. O. Tomashevich. *Steklo i Keram. Prom.* 1944, No. 9, 1–6; *Ceram. Abstracts* 1948, 7 (in *J. Am. Ceram. Soc.* 31, No. 1).—An investigation was made at the Chagodoshchensk plant to det. the cause for the drop in take-off of molten glass when a changeover was made from soda to sulfate charge (Fourcault process). The compn. of the sulfate was Na_2SO_4 79.15 to 92.9, $CaSO_4$ 2.62 to 9.19, $MgSO_4$ 0.93 to 4.81, and moisture 6.32 to 40.30%. Reducing agents were charcoal (4.30 to 48.83% moisture and 2.79 to 8.83% ash) and brown coal (15.50 to 38.72% moisture and 20.07 to 37.77% ash). By reducing the moisture in the charge prior to feeding to 5 to 10%, the take-off of molten glass was increased from 400 to 550–570 kg./sq. m. per day. It is essential that the reducing agent be stable and of high quality; the coeff. of reduction should be calcd. on the basis of SO_3 for all the sulfates instead of for the Na_2SO_4 only.

M. F. R.

METALLURGICAL LITERATURE CLASSIFICATION

TOMASEVICH, K.V.

NAME: TOMASEWITSCH, K.W., RAMM, G.S., SOROKA, G.M.

LOCATION:

POSITION:

TITLE OF PUBLICATION OR PAPER: Messung des Roehreneingangswiderstandes mit Hilfe einer Messleitung by RAMM, G.S., SOROKA, G.M., und TOMASEWITSCH, K.W., (Radiotechnik), Bd. 5 (1950) Nr. 3

REMARKS: Magazine borrowed from Library of Congress

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VOL: 3	11	DATE: November 1953

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TOMASEVICH, K. V., RAMM, G. S. and SOROKA, F. M.

"Measurement of the Input Resistances of Tubes With the Help of a Line", Radio, No. 3, p 5, 1950.

TOMASHEVICH, L.M.

PHASE I BOOK EXPLOITATION 421

Leningrad. Tsentral'nyy institut prognozov

Voprosy sinopticheskoy meteorologii (Problems in Synoptical Meteorology) Moscow, Gidrometeoizdat, Moskovskoye otdelniye, 1957. 129 p. (Its: Trudy, vyp. 61) 1,300 copies printed.

Ed. (title page): Uspenskiy, B.D.; Ed. (inside book): Sadovskiy, V.N.; Tech. Ed.: Zarkh, I.M.

PURPOSE: The collection of articles is intended for specialists working in the field of weather forecasting.

COVERAGE: The collection discusses the relationship between atmospheric pressure and weather forecasting.

TABLE OF CONTENTS:

Card 1/7

and anticyclones; these problems are still unsolved, despite the abundance of theoretcial and empirical data. One of these problems is the effect of thermobaric field structures on the origin of the cyclone and anticyclone, and also on the process of cooling and warming air by advection. The author analyzes the results of 110 observed cyclones and 82 anticyclones and discusses: (1) The geostrophic wind velocity along the isobaric levels of 700, 500, and 300 millibars and the horizontal temperature gradients at the 500 millibar level in the area of cyclones and anticyclones over the central, cold, and warm sections; (2) the advection of vortices at 700,500,and 300 mb isobaric levels and advective changes of temperature in the 500-1000 mb layers over the central section of cyclones and anticyclones; (3) the changes in the turbulent air movement and their dependence on elevation in the near-surface layer of the cyclonic area; (4) the changes in the mean temperature at 500-1000, 300-500, and 200-300 mb levels in the process of development of cyclones and anticyclones; and finally (5) the changes in baric pressures observed during a 12-hour interval. All the points considered may facilitate forecasting.

Card 2/7

There are 15 tables, 3 drawings, and 8 Soviet references.

Tomashevich, L.M. Cyclone Regeneration and the Effects of Vertical Currents on Thermobaric Field 56

The author analyzes the process and the effect of the penetration of air masses, mostly of cold air, into a cyclone area; such an injection (intrusion) represents a new source of energy capable of reviving a dying cyclone. The regeneration of a cyclone is linked with the deepening of the cyclone area; new fronts are created, the upward movement is intensified, the former direction of the cyclone movement is changed, and the precipitation is increased. Since a regenerated cyclone causes considerable shift in the prevailing weather conditions, these conditions can be predicted from some of the symptoms of the regeneration occurring. The author explains the nature of the regenerated cyclone and describes the principal changes which occur at T700 (absolute topography at 700 millibar level). The explanation is theoretical

and is based on the selected coefficients of vorticity; in this connection, reference is made to V.A. Bugayev who worked out a mathematical solucion of the problem of vorticity. Statistical data are derived from observations conducted between 1947 and 1951. Two pages of the author's own conclusions contain data on the distribution of velocities for primary and regenerated cyclones in various stages of their development and on the accompanying temperature behavior. The essential indications for the regeneration of a cyclone are given. There are 11 drawings, 5 tables, and 8 Soviet references.

Leonov, N.G. Cyclone Displacements Due to the Structure of the Baric Field in the Atmosphere 82

The author examines the rule of the leading jet in predicting the possible direction of a cyclone. This rule implies that cyclones move at 700-500 millibar levels with the direction of the wind above the cyclone area. However, since information on such winds is difficult to obtain, the author discusses and evaluates the possibility of using the data on the geostrophic

wind present over cyclonic areas. The author arrives at the conclusion that displacements of cyclones are affected by factors other than the winds alone. There are 29 tables, 3 figures, and no references.

Shishkova, I.A. Methods of Calculating Local Accelerations 111

The author reviews the problem of deviation of local winds from the geostrophic wind and offers an empirical rule for determining the direction of any such deviation through an analysis of local accelerations. Of particular importance in such cases is whether or not the wind in question deviates toward a low pressure or a high pressure area and at what velocity it moves. The mathematical solution, suggested by the author, results in 76-78 percent correct predicitions as to the direction of the wind. The author concludes that no connection exists between variations in the velocity of the wind and the direction it takes. An increase (or decrease) in wind intensity within 12 hours can occur with deviations toward either the high or low pressure areas. There are 2 figures and 3 Soviet references.

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Glazova, O.P. Determination of Maximum Daily Air Temperature by Vertical Sounding of the Atmosphere 120

The author recapitulates the standard method of evaluting the radiation balance for the interval of time between sunrise and the moment of maximum daily temperature, including the determination of the latter. Reference is made to the efforts of N.I. Bel'skiy and Ye. Gol'd which were directed to this end. The American meteorologist T. Williams is also mentioned in this connection, but his technique is rejected as not applicable to conditions in the European USSR. Bel'skiy's version is accepted by the author and explained in detail. Elaborating on Bel'skiy's method, the author of the article considers the following meteorological factors essential for the determination of maximum temperature: the flow of solar radiation, the dynamic turbulence, and the horizontal displacement of the air caused by the temperature gradient. The mathematical method reduces to defining the value of what is called by the author "an elementary square," a quadrangle enclosed between isobars with a 10 mb spread and isotherms 1° apart. This area

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